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THE EARLY DIAGNOSIS OF GASTRIC CANCER WITH A VIEW TO ITS RADICAL CURE.*

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In selecting so forlorn a hope as gastric cancer as the subject of discussion, in response to your invitation, I have been influenced by several considerations. It comes deplorably often within the line of my own work and is the *bete noir* which haunts my vision in an uncomfortably large proportion of the cases of chronic disease referred to me for diagnosis and treatment. The subject is one, furthermore, which must make a strong appeal to the interest of every general practitioner, because practically every case of this dread disease will make its debut under his personal observation. And the faint gleam of hope which appears to be breaking through the darkness for at least some of these patients depends for its realization upon the promptness with which the general practitioner recognizes the disease, or at least has his suspicions aroused sufficiently to call in expert aid for such assistance as can be rendered in the way of diagnosis.

*Read by invitation before the Toledo Medical Society, November 23, 1900.

There is a very strong impression, which appears to be supported by statistical evidence, that there has been within recent years a marked increase in the prevalence of cancer. Ewald says (Diseases of the Stomach, page 162) that from 35 to 45 per cent. of all cases of cancer involve the stomach, and that gastric cancer is responsible, according to different statistical studies, for from .5 per cent. to 2.5 per cent. of the total mortality from all causes. It therefore seems to be sufficiently prevalent to bring these cases within the range of observation of every practitioner of much experience.

In approaching the problems of diagnosis of gastric cancer we are confronted by difficulties of an extraordinary character.

There is one group of cases that will never be recognized early enough to make the diagnosis of practical value, because their latency in whole or part of their course, as recently pointed out by Osler, entirely fails to attract attention toward the stomach. In one of my cases, for instance, a retired merchant seventy-five years of age called at my office complaining of a slight indigestion of a few days duration. He declined to allow me to make a physical examination, saying that it was too trifling. A few days later I was called to the house by his daughter and insisted upon an examination. I found a palpable tumor in the region of the stomach, and at once made the diagnosis of gastric cancer. Within a week coffee ground vomit appeared, and death ensued in less than a month. So far as I could learn, there had not been a single symptom of any sort until within a week of his visit to my office.

Such cases ordinarily lie entirely outside the scope of early diagnosis, and yet they teach an important lesson, for very many of them could perhaps be diagnosticated early if the possibility of latent gastric cancer was more fully recognized and more constantly kept in mind.

Turning now to the symptomatology of incipient cancer, we are forced to admit at the outset that there is absolutely nothing distinctive about it. It is generally insidious, and such symptoms as are commonly associated with its inception are the result of the associated gastritis, atony, dilation, etc.

On the other hand, the so-called classical symptoms of gastric cancer, including hematemesis, rebellious vomiting a palpable tumor, etc., have no value whatever from the present point of view, and only serve the purpose of signing and sealing the doom of the

patient. In order to clear the ground it might be well at this point to explicitly define the intending limits of this discussion by indicating what is meant by an early diagnosis, and the purpose and value of the latter. In the first place there is only one treatment that is worth the name, and that is surgical in character. The function of the gastrologist is to establish the diagnosis as completely as possible and then call in a surgeon if the patient consents. Concerning the palliative treatment of cases which either cannot or will not be operated, I have nothing at present to say. A more momentous question confronts us—a higher obligation presses upon us.

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Again, radical surgical procedures only offer promise of lasting benefit when undertaken at a period antecedent to the gross signs and symptoms of gastric cancer. According to Czerny, Rindfleisch and Kraske (quoted by Hemmeter), it is too late for a radical and intentionally curative operation when a palpable tumor exists. If this is true, and it probably is in the vast majority of cases, we must either find means of earlier establishing at least a presumptive diagnosis or confess our helplessness in the presence of this disease. This has really been the mental attitude of the medical profession; but it seems to me that the time has come when something more can be expected.

Every case, then, of chronic stomach disease should be viewed with suspicion, especially if occurring in a patient over thirty years of age, although too much reliance must not be placed upon the age as cases of congenital gastric cancer have been reported, and it may occur at any age. It must be regarded as especially suspicious if the nutritional disturbances are excessive, although the presence of even a marked cachexia does nothing more than suggest cancer, and its absence by no means disproves the existence of the latter.

As already stated, the symptomatology of gastric cancer in the period with which we are now exclusively concerned is not at all distinctive and cannot be relied on to any great extent to establish a diagnosis. Without entering into any extended discussion of symptoms it will be advisable to briefly refer to some of those which have been supposed to have a definite value in relation to gastric cancer.

Anorexia more or less complete and sudden in its development is a frequent symptom. It simply points to a severe functional

disturbance of the stomach or nerve center for hunger, and may be dependent upon structural alterations of a grave character, malignant or otherwise, or, on the other hand, may be a pure neurosis, without stomach involvement of any kind. I have on the contrary seen several cases of fairly well advanced cancer without any notable impairment of appetite. Closely related to anorexia stands vomiting. This is very frequent, though often absent. It is said to depend largely upon the location of the cancer and to be quite constant when the latter involves either of the orifices. To this rule there are certainly many exceptions. In a recent case in which I made an autopsy, the entire pylorus was involved and greatly stenosed, and the cancerous mass extended more than half way to the cardia along the lesser curvature, and yet vomiting was conspicuous by its complete absence throughout the course of the disease. Pain is said by some observers to be the most constant of all symptoms, and a pretty early one. The case already referred to in the early part of this paper shows how unreliable it is, and yet it has, like the other symptoms referred to, a certain diagnostic value. Hemorrhage does not, as a rule, concern us here, although in certain cases in which the gastric mucosa is primarily involved very early ulcerative processes might give us hemorrhage as an early symptom. The existence of a palpable tumor does not concern us now at all. The phenomena of malnutrition and auto-intoxication which go to make up the clinical picture known as cachexia are not, as a rule, sufficiently early to serve our present purpose, for adhesions and metastases are likely to occur quite as early, and when they have occurred the case has passed absolutely outside of any other than palliative therapeutics. Nevertheless, a suspicious grade of subnutrition, characterized by varying degrees or emaciation, general debility, and other like disturbances, may occur soon enough to be characterized as "early" in the present meaning of that term.

Obstinate constipation is present in a large majority of cases, but data are lacking to show the period of its development.

The condition of the blood in gastric cancer is not different from that of any other grave nutritional disease. The oligocythemia and impoverishment in hemoglobin have for the most part appeared to go hand in hand in the cases which I have studied. Later—too late to aid in the early diagnosis—the color index falls. The absence of digestive leucocytosis probably also occurs somewhat too

late for our present purpose, although it should be carefully sought.

Peptonuria, if found in cases in which suppurative processes can be excluded, is of decided value as indicating absorption of peptones from an ulcerated surface in the gastro intestinal tract. This might easily occur under certain conditions soon enough to be of distinct service in the early diagnosis of malignant disease of the stomach.

Turning now to the technical examination of the stomach, we can scarcely hope to receive much aid in early diagnosis from the determination of size, position, etc.; nevertheless this should be done with the greatest possible accuracy. It is not my purpose to enter into a discussion of methods, as time would not permit it. The lower border can easily be determined by Penzoldt's method, and the general area verified by the succussion sign, and the phonendoscope. The determination of the upper border has heretofore been attended with great difficulties, and has, in fact, been practically ignored, and arbitrarily assumed to be at a certain level—which is an absurd assumption at least in pathological cases. Within the last year I have devised a method which does away with this uncertainty, and which, I have not the slightest hesitation in asserting, marks a distinct and material advance in gastric diagnosis. By means of the very simple instrument herewith exhibited, called a cardiameter, and which was originally presented to the American Gastro Enterological Association at the meeting in Washington last May, and the use of an X-ray machine, it is possible to locate the upper border, or at least one point therein, with absolute precision. For fuller details reference must be made to the *Phil. Med. Jour.* for July 28, 1900. By these methods, conjoined with inflation, we can determine the presence or absence of ptosis and ectasia, which, while it may not furnish much immediate aid in diagnosis, will serve as invaluable data for comparisons in the future observation and study of the case, during the more or less prolonged period of uncertainty through which, unfortunately, many a case must pass.

We come now to the direct chemical and microscopical study of stomach contents, under varying conditions, as the final and most important diagnostic procedure. From a medical point of view interest centers principally in hydrochloric and lactic acid. The hope originally entertained that the absence of free HCl would prove the existence of cancer is only a reminiscence now. Not

only does the absence of HCl fail to prove cancer, but its presence, even in large amounts, does not exclude cancer. In fact, hyperacidity is somewhat characteristic of cancer developing on the basis of an old ulcer. But, independently of this important group of cases, extensive primary cancer may exist with free HCl secretion. This depends upon two circumstances, viz: The location of the neoplasm and the associated or antecedent gastritis. If it occupies the pyloric region exclusively, and if there is not much associated gastritis, the case may progress very far without disappearance of free HCl. Notwithstanding these discouraging discrepancies in regard to HCl secretion in gastric cancer, its careful and intelligent study is of the highest importance from a diagnostic point of view. It is not so much the absence or low percentage at a single examination which is indicative of cancer, although these points in a single examination will be given their due weight, as it is the progressive loss of the secretion, under management which ought, in the absence of malignant disease, either restore secretions or at least prevent further loss. With the single exception of the large and important group of cases comprised under the term *ulcus carcinomatosm*, and which present a characteristic history, there is, from a very early stage of cancer, a gradual deterioration of HCl secretion. No medical treatment whatever, be it local, medicinal, dietetic, or hygienic, will stay the progress of gastric cancer; and if the loss of free HCl secretion is dependent upon the latter it will be progressive in spite of any treatment. Thus the progressive loss of HCl secretion occurring in the face of adequate treatment, when taken in conjunction with other features of the case, becomes of the greatest importance.

The conditions under which the secretion is obtained must be carefully considered. I use, for the most part, the Ewald test breakfast, which is examined in one hour. If a single test should fail to give a reaction for free HCl it should not therefore be hastily concluded that it is constantly absent. The stomach secretion may be somewhat slow, and another test should be made giving more time. If it is really absent the degree of defective secretion can be most quickly determined by adding decinormal HCl solution to a measured quantity of gastric juice until the latter gives the reaction for free acid. This is only roughly approximate, but serves for clinical purposes. The complete absence of HCl secretion can only be established by estimating separately the total

chlorine, and fixed chlorides, and finding a coincidence of the two analyses.

With reference to lactic acid,, its presence like the absence of free HCl has utterly failed to have any pathognomonic significance, and yet, its presence at a time when it should be absent, has a distinct bearing upon the diagnosis. I have found it in the stomach contents many times when there was not the slightest suspicion of cancer and where the subsequent history showed that it did not exist. The lactic acid forming organisms are held in abeyance by HCl, either free or combined, and when there is a complete absence of the free hydrochloric acid the organisms usually grow more or less luxuriously with the production of lactic acid. The conditions presented in gastric cancer, however, appear to furnish a soil particularly favorable to their development, in which fact lies their significance; and thus we find lactic acid as a very frequent but by no means constantly early phenomenon of this disease. Like the absence of free HCl, its presence proves nothing, but is simply another factor to be taken into account in reaching our conclusions in any given case.

I cannot take time to discuss in detail the methods for the detection and determination of hydrochloric and lactic acids. The Gunsberg reagent or resorcin serves to quickly determine the presence or absence of free HCl and the intensity of reaction gives a general idea of the quantity; the latter, however, can only be accurately determined by titration with a decinormal alkali, using dimethyl for the end reaction after having demonstrated the presence of hydrochloric acid by one or more of the reagents already referred to. The Uffelmann test serves as a ready means of detecting pathological amounts of lactic acid in the gastric juice, which has more significance if found with Boas' test meal of barley soup, after thorough lavage.

There remains for consideration the microscopical evidences to be obtained from the washings of the fasting stomach. This evidence is of the greatest value and frequently settles the diagnosis beyond a doubt. I will briefly consider it under three heads—first, the bacteriology of the stomach contents, which has been exhaustively studied by F. B. Turck and others; second, the grosser histology of tissue fragmenes which may be obtained from the stomach; and third, certain peculiar changes in the segmentation processes of the nuclei of living cells. The bacteriology has already

been indirectly referred to in the discussion of lactic acid, and it is the lactic acid forming organisms that play the most important role in the diagnosis of gastric cancer.

There is quite a variety of micro-organisms which produce lactic acid, several of which may be found in the stomach, but there is only one to which any great importance is attached in the diagnosis of gastric cancer. That is the so-called Oppler-Boas bacillus. This is an unusually long rod-shaped organism which was thought at first to be found only in cases of gastric cancer. This was soon shown to be a mistake, as it was found in many cases rarely under other conditions. I have found it in many cases of chronic gastritis, with atrophy of the oxyntic gland cells. Nevertheless, the conditions present in cancer of the stomach furnish an extraordinarily favorable soil for its rapid growth and it is found in a large majority of all cases and at a practically early stage. As a corroborative sign, therefore, it is of decided value in diagnosis when taken, as every other symptom and sign of early gastric cancer must be, in relation to every other factor of the case. These organisms are easily recognized by their unusual length and absence of motility, which is further corroborated by the presence of lactic acid in the gastric contents. While again disappointed, therefore, in seeking for pathognomonic evidence of cancer of the stomach, the profuse growth of this organism is of very high value as an aid in diagnosis and should always create a suspicion of developing cancer.

The examination of tissue fragments obtained in the wash water of the fasting stomach frequently furnishes evidence sufficient by itself to fully establish the diagnosis. This does not, unfortunately, always occur as early as we would like for our present purposes, and indeed may be entirely absent until the early stage, properly so-called is past. A proper and systematic search of the wash water, however, would in many cases reveal important evidence of this sort where it is commonly entirely overlooked. The wash water is allowed to stand for a little while in the method practiced in my own laboratory, giving sufficient time for tissue fragments to settle, after which the supernatant fluid is decanted off and the residue poured into a shallow glass container with a large, clear, smooth bottom, such as a petri dish, and carefully examined in a good light. (I use a movable electric light in my laboratory) over both a light and dark background. Of course, large frag-

ments will be easily seen without the observance of this technique, but minuter ones, which may be just as important from a diagnostic point of view, may be entirely overlooked unless this or a similar method is scrupulously followed. In practically all cases of chronic gastritis this search will reveal minute fragments of mucosa which should be carefully stained and studied, although they may obviously come from a portion of the stomach distantly removed from the neoplasm, if one exists, and may therefore appear perfectly normal. Perseverance, however, in the examination will sooner or later be rewarded by finding fragments of mucosa from the seat of the lesion, which may show the characteristic structure of the cancerous process. If, as sometimes happens, larger masses are broken off from neoplastic formations, it will be necessary to imbed them in paraffine or celloidin, section, mount, and examine in the usual manner. Sometimes these fragments are quite large. I present herewith a photograph of fragments obtained in a case of chronic stomach disease, the fragments being photographed upon a 1x2 microscopic slide, the latter thus serving as a rough scale for measurement. In this case, although the fragments were so very large, the process was apparently a purely round cell infiltration, a photomicrograph of which is also exhibited. While such a process may occur in conjunction with a malignant neoplasm, the contrary assumption is a fair one and the interval of more than a year since the fragments were obtained in this case shows that I was not misled. It will be impossible to discuss in detail the histological characters of these fragments which justify a diagnosis of cancer.

In cases where where these tissue fragments are not obtained and a special effort is desired to procure them, a very simple procedure, first recommended, I think, by Hemmeter, can be resorted to in the shape of curettage with the end of the stomach tube. This is involuntarily done in many, if not most cases, especially where the stomach tube is introduced an indefinite distance and retching occurs. To this is due the hemorrhage which frequently occurs during lavage, and the frequency of fragments of gastric mucosa largely depends upon it. It may, however, be made much more thorough and fragments obtained by this means, which would not otherwise be procured.

The use of the gastroduaphane in diagnosis of gastric cancer is limited, although no examination with negative results can be

considered complete which has not included the use of this instrument. It at least helps to locate and indicate the area of the stomach, and in those rare cases in which the neoplasm occupies the anterior wall of the stomach may positively demonstrate the existence of a tumor, or even a thickening of the stomach wall in exceptionally favorable cases so slight as to still leave the case in a comparatively early stage.

The study of intracellular or really intranuclear changes in pathological cells as an aid in diagnosis is a comparatively recent idea and is based upon some exceedingly interesting biological observations. The structure of the nucleus is made up of an enveloping membrane containing a nuclear fluid and a nuclear substance, the former being homogenous and the latter constituting the chromatin or staining substance of the nucleus in the form of fibrils generally known as chromosomes. The cell divisions which occur under various degenerative and regenerative processes are for the most part, and indeed with very rare exceptions, heralded by antecedent changes in the nuclear substance of a highly typical and characteristic nature. These generally are called mitoses, from the Greek word, *mitos* (a thread), having reference to the thread or fibrilike form of the chromosomes. The process is known as karyomitosis, or karyokinesis, and usually occurs in the typical manner already referred to and which I will briefly describe.

The chromosomes ordinarily existing in a so-called resting state assume unusual activities, arrange themselves in new forms and relations, and finally undergo an equatorial and absolutely symmetrical division. This division, as the term indicates, corresponds precisely to the equator of the skein-like form which the chromosomes assume in the resting state. This division becomes more and more complete, each symmetrical half of the nucleus finally arranging itself as an independent nucleus, the nuclear membrane and fluid undergoing a corresponding division until finally two complete nuclei are produced. Later the cell body itself undergoes division and two complete cells have been produced by the mitotic processes.

Under certain pathological conditions absolute symmetry of these primary alterations in the nuclear substance becomes interfered with and an asymmetrical or atypical change takes place, the precise significance of which is the subject of the present discussion and has a bearing upon the diagnosis of gastric cancer.

I believe it was Hanseman who first made a diagnosis of carcinoma upon finding this assymmetrical mitosis in the peritoneal fluid removed in a case of ascites. It was hoped that here again something essential and peculiar to cancer had been discovered, the existence of which would aid in diagnosis. Later researches, however, by Stroeb and others showed that this atypical cell division really occurred in other neoplasms and regenerative tissue processes.

At the present time the concensus of opinion is that atypical mitosis, like the absence of HCl and the presence of lactic acid and the Oppler-Boas bacillus occur in other conditions as well as in gastric cancer, though especially frequent in the latter, and are entitled to distinct weight in the question of diagnosis.

In order to study these processes well, the technique must be carefully carried out. The individual cells found in stomach washings or sections of tissue fragments obtained must be deeply stained with a good nuclear stain, of which I prefer safranin or hameatoxylin, sufficiently decolorized to make the nucleus stand out boldly, and the cells carefully studied with a 1-12 inch immersion lens. If these atypical processes are found to be present it constitutes another link in the important chain of evidence supporting the diagnosis of gastric cancer. I wish to mention finally, although not by any means of least importance, motor insufficiency of the stomach as evidenced by the continual presence of partially digested food in the intervals between digestion. The states of nutrition which permit of the development of such a disease as cancer are not conducive to vigorous motility, and so we find this condition very constantly present at a rather early stage of the disease. This condition has been termed by Einhorn ischochymia, a brief and convenient designation for the state indicated.

Having now rapidly surveyed this large field in a manner most unsatisfactory to myself and yet as fully as the conventional and proper limits of an evening discussion permits, we find that with the single exception of the demonstration of cancerous fragments in the wash water of the stomach, there is no single fact or circumstance that will absolutely demonstrate the early diagnosis of gastric cancer. The diagnosis cannot rest exclusively upon any one finding like the Klebs-Loeffler bacillus in diptheria or Koch's bacillus in tuberculosis with the single exception already noted. It is on the contrary what may be termed in contra-distinction, to

such as these, a rational diagnosis. It is very difficult to formulate specific statements as to what would constitute a proper basis of diagnosis because the same factors will have a different value in different cases and must therefore be carefully weighed in relation to the case under examination. Progressive increase of ischochymia, with malnutrition, progressive diminution of free HCl, and of peptic digestion, with perhaps the addition of pain, the presence of lactic acid and the Oppler-Boas bacillus with a typical mitosis appear to be the most reliable data at present available. In the existing state of our knowledge it must be conceded that the early diagnosis of gastric cancer is one of the most difficult problems which confronts the clinician, and yet I am convinced that a thorough and practical study of all the data which have been indicated, applied to the circumstances and personality of the individual case will enable us to often reach a diagnosis sufficiently early to give the patient an opportunity of receiving the benefits of a radical operation. This can be done with all the more boldness inasmuch as exploratory laparotomies are now made with so small an element of danger that they are not entitled to very much weight in summing up the hazards of the situation as compared with the utter hopelessness of gastric cancer which has passed the operable stage. I will not occupy any time in discussing the surgical aspects of the question further than to say that its feasibility and utility have been absolutely demonstrated and that the future of these cases rests largely upon the alertness, conscientiousness and skill of the diagnostician, and the boldness of the surgeon in meeting the exigencies of the case. There seems to be no doubt whatever that cancer is primarily a local disease, and if it can be attacked sufficiently early and extirpated with a free, fearless and relentless hand the prospect of a radical cure may be said to be encouraging.

SOME USES OF LOCAL ANAESTHESIA IN GENITO-URINARY SURGERY.*

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At the risk of repetition of some things which may already be practically familiar to members of this society, the writer ventures

*Read before the Vanderburg County Medical Society, at Evansville, Indiana, November 20, 1900.

to call attention for a few moments to some personal experiences with local anaesthesia in the field of genito-urinary surgery.

It is scarcely necessary to say that wherever local anaesthesia will answer as well it is better to use it, than to resort to general anaesthesia. It is also true that in many cases the use of general anaesthesia may be so dangerous that local anaesthesia should be used, if it can be made at all practicable. Attention is invited briefly to a few conditions in which this method is of value, and some conditions where it is not practically useful.

Among the operations in which the writer has used it with more or less success may be mentioned circumcision, amputation of the penis, radical operations for hydrocele, ablation of the scrotum, the open operation for varicocele, operations upon strictures, both by divulsion and cutting, including internal and external urethrotomy, perineal section for bladder drainage, perineal section for dilatation of the prostatic urethra, perineal section for use of the galvano-cautery on prostatic hypertrophies, and in one case perineal section for removal of stone from the bladder.

CIRCUMCISION.

The infiltration method in this operation is too well known to admit of any discussion, except to say that it is not applicable in some cases of extensive sub-perputial adhesions in adults, and that it is rarely practicable in very young children. In the past ten years the writer has not given a general anaesthetic to perform circumcision, except in the above mentioned cases. In two very recent cases in boys of two and a half and two years of age it proved successful in one and failed in the other. In the latter case a very small perputial orifice existed. Firm adhesions were also encountered, the prepuce was not successfully retained behind the corona, and a subsequent operation under general anaesthesia was required.

AMPUTATION OF THE PENIS.

In one case of epithelioma of the glans penis the organ was amputated under local anaesthesia about one-half inch in front of the peno-scrotal juncture. In this case anaesthesia was complete, and the divided ends of the fibrous envelope of the corona cavernosa were stitched together in the usual way, and the cutaneous margin of the wound anchored to the mucous membrane of the

uretha. The patient expressed himself as having suffered no pain, and the anaesthesia was apparently all that could be desired.

HYDROCELE.

In cases of open operation for hydrocele, very little pain is experienced if the puncture perfectly covers the proposed line of incision. In this operation the writer has repeatedly used the Schleichs method successfully, and even where it has been found necessary to make a double opening into the tunica vaginalis testis, it has given satisfactory anaesthesia. It does not, of course, anaesthetize the entire inner surface of the tunic, but that part is ordinarily not very sensitive, and after the opening has been made the finger can be inserted, or a curette can be used with comparative impunity.

ABLATION OF THE SCROTUM.

In shortening the scrotum, King's clamp has generally been used in the writer's cases, and the clamp placed in position and slightly tightened before the anaesthetic was injected. The needle is made to pass between the jaws of the clamp and an effort is made to cover the entire area included between the jaws of the clamp. The clamp is then tightened, and the proposed line of incision is thoroughly anaesthetized. In using the clamp above referred to, it is easy to place the sutures in position either before or after cutting off the redundant portion of the scrotum. It is desirable to always remove the clamp before the stitches are placed in position and before they are tied. Failure to observe this precaution involves possible danger of bleeding from vessels that have retracted, and are not included in the sutures, and the bleeding is not apparent until the clamp is removed. If the stitches are placed in position and not tied until the removal of the clamp it is ordinarily easy to tie or twist any bleeding points. In one case in which the writer operated in his office, he trusted to the closely placed sutures to control the hemorrhage, and tied them, and then removed the clamp. The sutures controlled the hemorrhage perfectly, except at one point where a small retracted artery bled so freely as to necessitate the removal of the majority of the stitches and pulling the testicle out through the wound, in order to find and tie the bleeding point. If the sutures have been tied before the clamp has been removed it would seem better to leave the clamp in position for

an hour or two under a temporary dressing, in preference to an immediate removal with the risk of hemorrhage.

VARICOCELE.

While it is possible to open the scrotum and to draw the testicle out through the wound and examine it, it is not very easy to do an open operation for varicocele under local anaesthesia. The writer has succeeded fairly well in but one case. Manipulation of the cord and testicle in searching for and tying the varicose veins produces more or less pain, and in the nature of things local anaesthesia can only be successful in exceptional cases and should not be relied upon.

STRICTURE.

In securing anaesthesia for either dilatation or cutting of stricture in the anterior urethra very satisfactory anaesthesia can be produced with a small amount of cocain solution. This is also true in dilating or divulsing strictures in the deeper urethra. It is a mistake to use a large quantity of the anaesthetic solution, as unpleasant effects from the drug are liable to occur and the local effects are no better. Ordinarily sufficient insensibility is secured by taking an ordinary medicine dropper, the end of which has been slightly blunted in an alcohol flame, and filling it two-thirds full of an 8 per cent. solution of cocaine. The end of the dropper should be passed slightly beyond the meatus, and before the fluid is injected the meatus should be closed tightly around the dropper with the thumb and finger of the opposite hand. After the solution is injected the dropper should be withdrawn and allowed to fill with air and immediately reinserted, and the air injected into the urethra. Meanwhile, the meatus is kept constantly closed by pressure of the opposite hand, and only opened sufficiently for reintroduction of the dropper. After the air has been introduced the penis should be drawn slightly tense upon the abdomen and the meatus kept closed, while with the opposite hand the loose tissue of the scrotum is used to push the cocaine solution back and forth, by up and down rubbing along the line of the urethra. This manipulation is accompanied by a gurgling sound as the air distends the urethra and carries the cocaine solution to every fold of mucous membrane in the canal. It is well to continue this rubbing for ten or fifteen seconds and then allow the solution to escape from the meatus.

About three minutes should elapse before the operation is commenced. A little exploration of the canal with the sound will then determine, with approximate accuracy, the success of the anaesthesia, and if it is not complete a small additional amount of cocaine solution can be injected, and in two or three moments there is rarely any pain likely to be encountered. Under this form of anaesthesia the writer has repeatedly stretched or cut the densest stricture to the full normal caliber of the canal.

PERINEAL SECTION FOR DEEP URETHIAL STRICTURES FOR DILATING

THE PROSTACTIC URETHA, FOR CAUTERY WORK IN CASES OF
ENLARGED PROSTATE FOR BLADDER DRAINAGE, AND
FOR REMOVAL OF STONE FROM THE BLADDER.

Perhaps there is no class of cases where the avoidance of general anaesthesia is so necessary, if possible, as in patients who have been for a greater or less length of time suffering from obstructive disease of the lower urinary tract, and where resultant disease of the bladder coexists with the chronic inflammation that has followed the mechanical obstruction in the bladder and urethra. It is not the writer's purpose to discuss the pathology of these cases, and only refer to the operative technic in so far as the latter relates to the use of local anaesthesia. It is, however, well known that in sclerotic and other conditions in the kidneys the use of a general anaesthetic is most hazardous. If nothing but a perineal drainage opening is made, and general anaesthesia is used, many of these cases, particularly among old men, will die in from one to two weeks from uremia. The latter is a well recognized secondary sequence of both ether and chloroform. The writer, however, hopes he will not be misunderstood as objecting to its use in any case where the conditions seem to make general, instead of local, anaesthesia necessary. In making perineal section for any of the foregoing purposes, the writer adopts the following method. The urethra is anaesthetized in the manner already mentioned in connection with dilatation and internal urethrotomy. Care is taken to inject a little more air with the cocaine solution than would be necessary for anaesthesia of the anterior or middle portion of the canal. At the close of the rubbing process with the scrotum an effort is made to force the cocaine solution and air into the bladder by making perineal pressure along the line of the deep urethra. A few drops of the 8 per cent. solution are then injected into the

prostatic uretha with a deep urethal syringe. Three minutes' time is then allowed to elapse and the Schleich infiltration solution is then used for anaesthetizing the skin and deeper tissues along the proposed line of the perineal incision. One hypodermic tablet containing one-fifth of a grain of cocaine, one-fifth of a grain of chloride sodium, one-fortieth grain of morphia is dissolved in a hypodermic barrel filled with sterile water. A very superficial subcutaneous puncture is made along the line of the external incision. A drop or two of the solution is injected immediately underneath the skin and a little bleb is raised and the needle is then passed its full length parallel with the surface of the perineum and immediately beneath the skin. It is then slowly withdrawn and a little of the solution forced beneath the skin as the needle is withdrawn, and a watery bleb is thus raised along the entire line of the incision. A slightly deeper puncture is then made in the same manner and a grooved staff placed in position and held by an assistant. The hypodermic needle is then thrust through the center of the already injected area, and the point is passed directly through the tissues until the end of the needle touches the grooved staff in the uretha. The needle is then slowly withdrawn as the fluid is injected. The three punctures mentioned in the above described process will not ordinarily require more than one hypodermic barrel of the injecting solution. Test of the degree of anaesthesia should be made with a needle or knife, and if necessary the same quantity again injected. After the injection is made no time is allowed to elapse, but an incision is immediately and freely made through the perineum to the staff and a Lyttles director is passed along the knife blade to the grooved staff. The knife is removed and the Lyttles director passed on into the bladder. The staff is then removed and a larger director or a blunt gorget is passed along the grooved staff and the wound and uretha thus dilated. If farther stretching of the membranous or prastactic uretha should be necessary, one of the grooved directors is left in position while the index finger of the right hand is passed along it and into the bladder. It requires but a moment, however, and the suffering is less by far than in the extraction of a tooth. In view of the fact that the cutting part of the operation is painless, and that only the minority of cases require the extreme dilitation referred to, it would seem preferable to inflict the momentary pain involved in preference to using anaesthesia in many cases.

The writer has several years ago, in a paper before the American Association of Genito-urinary Surgeons, advocated the use of the galvano-cautery in certain cases of nodular and pedunculated intra-urethral prostatic hypertrophies. The manner then used was as follows: In cases where perineal section for drainage revealed the presence of intra-urethral growths, the external wound was made somewhat larger than usual and a very large tube inserted. After drainage for a few days the tube was removed, and the finger inserted into the wound and the projecting growths located. A single straight tenaculum was then passed over the handle of the straight tenaculum and pushed on through the wound, so that the farther end covered the point held by the hook. A little tension was then made on the tenaculum to draw the hyperterophied tissue into the field of observation and the entire surface thus exposed was then thoroughly cocanized by direct application of an 8 per cent. solution. Direct inspection was obtained by the use of a head mirror and punctures made with the galvano-cautery. The resultant slough occasioned no special trouble and the pain incident to the procedure was either trivial or entirely absent. Recently under local anaesthesia this method has been extended to small growths about the vesical orifice. The method used is to make a free perineal section, and after waiting for a few days' drainage, to then locate the growth by means of the finger and with a Kocks cystoscope, with a cold light for observation, and to make punctures in any observed hypertrophies with a long electrode having a slightly curved end. It is the writer's judgment that the use of cautery in this manner is somewhat limited in its usefulness and gives a comparatively small area observable in operating, and yet it has seemed to accomplish good results in two cases.

In one case a few months since the writer attempted to remove a stone from the bladder by crushing. The stone was so securely lodged behind a projecting shelf of enlarged prostate that it was inaccessible to the lithotrite. A portion of it was removed, but the larger part could not be reached, and owing to co-existing advanced kidney and liver trouble, a general anaesthetic was deemed unsafe. After an ounce of a 2 per cent. solution of cocaine was injected and the urethra and perineum anaesthetized, as heretofore described, the bladder was opened and the stone, measuring an inch and one-fourth in its long diameter, was removed.

In all the foregoing conditions the writer regards local anaes-

thesia as of the greatest practical value in cases of perineal sections for bladder drainage. In the past year and a half he has not given a general anaesthetic where the purpose was simply to open and drain the bladder by the perineum. Where other work than simple drainage was involved, general anaesthesia has usually been resorted to. Cases for simple drainage have usually been prolonged cystitis from an enlarged prostate and from stricture of the urethra. Some of the cases have been those where general anaesthesia has seemed to involve very great risk. Only two weeks ago perineal section was made in a man eighty years of age, who had an enlarged prostate and acute retention of urine. The bladder was filled with blood and urine almost to the umbilicus and the patient had passed little or no urine for twenty-four hours. A free opening was made and a large tube inserted and drainage and bladder irrigation has been continued since. The patient had no unpleasant symptoms resulting from the anaesthetic or the operation.

SOCIETY PROCEEDINGS.

ALLEN COUNTY MEDICAL SOCIETY.

The annual meeting of the Allen County Medical Society was held in the assembly room of the court house, at Fort Wayne, on Wednesday, December 26. The address of the evening was delivered by Dr. W. N. Wishard, of Indianapolis, the subject being "The Present Status of Prostatic Surgery." This address is published in full in this number of the JOURNAL-MAGAZINE.

The annual election of officers resulted as follows: President, Dr. E. J. McOscar; Secretary, Dr. E. E. Morgan; Treasurer, Dr. S. H. Havice; Board of Censors, Drs. E. A. Crull, G. L. Greenawalt, C. B. Stemen.

Following the scientific program the members, invited guests and ladies, to the number of about seventy-five, adjourned to the Aveline hotel for the annual banquet. The retiring president, Dr. G. B. M. Bower, acted as symposiarch and the following gentlemen responded to appropriate toasts: Drs. Buchman, Porter, Havice, J. C. Calvin, and A. W. Brayton, of Indianapolis.

PROGRAM OF THE ALLEN COUNTY MEDICAL SOCIETY.

The program of the Allen County Medical Society has been placed in the hands of the members. It is one of the neatest and most attractive programs issued by the Society. Thirty-six papers have been listed for presentation at twenty-one meetings, and provisions have been made for four special meetings, at which essayists from out of the city will be invited to present papers before the Society. It is also expected that a large number of case reports will be presented at various meetings throughout the year.

On January 29, the Society will devote its attention to medico-legal subjects, and all members of the medical fraternity in the city of Fort Wayne have been invited to be present at the meeting and participate in the discussion of the papers presented.

On June 18 the Society will hold its midsummer meeting at Robison park as usual, and conclude the day's performance with a dinner and theatre party.

The annual meeting will be held on December 23, the program consisting of election of officers and addresses by some medical men from out of the city invited for the purpose, and concluding with a banquet.

Fort Wayne Medical Journal-Magazine

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A Journal of Medicine and Surgery, Published between the 1st and 15th of every month. Price, \$1.00 Per Year, Postage Prepaid.

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All Communications, Subscriptions, and Books for Review should be addressed to the Editor of the FORT WAYNE MEDICAL JOURNAL-MAGAZINE, 55 West Wayne Street, Fort Wayne, Ind.

EDITORIALS.

X-RAY DIAGNOSIS.

The marvelous discovery of Roentgen which enables us to take shadow pictures of the internal portions of the human body, and especially of the bones, is becoming one of the commonplace phenomena of science. Its full value as a diagnostic aid outside of the surgical affections of bones and joints does not seem, however, to have received the full recognition to which it is entitled. Especially in disease of the chest organs and abdominal viscera it is of the highest value in settling difficult questions in regard to form, position, etc., in many obscure cases. The precise form and outline of the heart, for instance, can be accurately delineated in cases in which the ordinary auscultatory signs leave the matter in considerable doubt. The occurrence of neoplasms, tuberculous deposits, cavities, etc., in the lungs can also be accurately seen and photographed. The movements of the diaphragm and also the move-

ments of the heart itself can be deliberately studied with the fluore-scope. By placing a bismuth emulsion in the stomach or colon a perfectly distinct photograph can be taken of either of these organs. In some cases of brain disease and brain injury it gives us information that cannot otherwise be obtained. The difficulties in brain diagnosis by means of the X-ray are very great and its applicability in this direction will be somewhat limited, yet whatever evidence it can furnish will be gratefully received and in some cases is undoubtedly invaluable.

One of the greatest drawbacks in the satisfactory use of the X-ray for diagnostic purposes is a faulty process in the photography. A good photograph will show what the negative will entirely fail to reveal excepting with the greatest difficulty. In examining the negative, so much depends on the background, upon intensity and angle of light that it is rarely that the full meaning of the shadows will be obtained. A well made print, however, is like what it is, a printed page, and can be read with ease and precision. The writer has recently perfected and fully equipped his X-ray laboratory and finds, with the aid of an assistant who has thoroughly mastered the technique of photography, that he is able to get much more help in internal diagnosis in the class of cases above indicated than ever before.

The full value of this method of extending and verifying the ordinary methods of diagnosis will ultimately assume its proper relations, but at present does not seem to be as fully appreciated as it should be.

M'CASKEY.

MEDICAL LEGISLATION—VIEWS OF MEMBERS OF THE SHELBY COUNTY INDIANA, MEDICAL SOCIETY.

We, the undersigned, members of the Shelby County Medical Society, disapprove of the late action of the State Committee on Medical Legislation, who, in joint session with the State Board of Medical Registration and Examination, have decided to recommend to the present Legislature that all graduates hereafter be re-examined by the State Medical Board before they are permitted to practice medicine in this State.

We have confidence in our Medical Schools, and in the ability

and integrity of their teachers, and believe that after a student has taken a four years' course in one of them, and passes all the rigid examinations of each year and is finally deemed worthy to receive a diploma, that he should not be humiliated by being compelled to appear before a mongrel medical board, appointed by the state, for re-examination.

We have requested our representatives in the Legislature to vote against such a proposition.

Shelbyville, Ind., January 5, 1901.

The above is a copy of a circular letter sent out, we presume, by some of the members of the Shelby County Medical Society. We say, we presume, because the copy sent us was not signed. Whether the recommendation of the state committee is a good one or not depends upon the character of the State Medical Board, and this will depend upon the way the members are appointed.

To be compelled to pass an examination before a board composed of men appointed, as they often are, solely for partisan political reasons, would certainly be "humiliating;" but not so if the members of the Board are appointed through recommendation of the State Medical Societies. A board of examiners chosen in this way and proportioned fairly between the different recognized schools would be a good thing.

There is no more reason why the degree of M. D. should confer the right to practice medicine than that the degree of A. B. should confer the right to teach school.

If every state in the union had an examining and licensing board appointed in the way suggested, and completely divorced from partisan politics, the question of medical education would no longer require attention. A license to practice secured from a board of this kind would be recognized in all the states. All that the people of any state ask is that those who desire to practice among them should prove themselves competent, and they would without doubt consider a license obtained in this way as quite sufficient proof of their competency.

That a degree of M. D. conferred by a private school in Indiana should confer upon its holder the right to practice in Ohio is ridiculous; that a license conferred by a board of examiners in Indiana acting solely in the capacity of public servants and with no personal interests at stake, should be accepted as sufficient proof

of competency to practice by the authorities in Ohio, is reasonable and right.

A board of examiners appointed in the way indicated, membership in which shall be forfeited for cause only, with provision for adequate pay for the services of its members, will accomplish more for the true interests of the profession, which are identical with the interests of the public, than can be accomplished in any other way. P.

THE ANTI-VACCINATION BILL.

One of the bright and shining lights in the Indiana State Legislature, who hails from Allen county and makes his home in the city of Fort Wayne, announces that he will stir up the blood of the medical profession in the State of Indiana by introducing in this session of the Legislature a bill, the provisions of which will make it impossible to have compulsory vaccination in the State of Indiana, and impossible to keep any person out of the public schools or any other public building who has not been duly and properly vaccinated in accordance with the present rules of the Indiana State Board of Health.

It is perhaps a little humiliating to the physicians of Allen county to know that their representative in the Indiana legislative halls has so little regard for public health measures, which have been instituted for the protection of the people of the State and the saving of human life. It is also to be regretted that such an individual should entirely overlook the absolute and incontrovertible proof regarding the efficacy of vaccination as a preventive measure, as fully and emphatically demonstrated in numerous smallpox epidemics that have occurred throughout various portions of the world during the past few years.

There are, however, some people who do not act in accordance with their convictions, but rather in accord with a selfish desire to create for themselves cheap and worthless notoriety. It is a lamentable fact that every man with a senseless and illogical notion in his head will find some followers who have as little mental balance as he, and who glory in the knowledge that they have struck a trail which is not followed by the average man of intelligence.

It is to be expected that the proposed anti-vaccination bill will

have some supporters in the Indiana State Legislature, but we do not believe that the law touching upon the question of vaccination as it now stands upon the statute books is in any serious danger at the hands of the statesman from Allen county. We have the utmost faith in the intelligence and good sense of the majority of the members of our State Legislature, and cannot, therefore, believe that they will listen to an appeal from Allen county for an erasure from the statute books of a law that means the protection of the people of the State of Indiana from the ravages of a disease whose path is marked by death or disfigurement for life.

Meanwhile, however, we suggest to our medical friends the advisability and propriety of consulting their various representatives with a view to encouraging them in the belief that the present vaccination law is a wise one so far as it goes, and requires no alteration except it be to make it more stringent. A. E. B.

CHANGE IN THE EDITORSHIP OF THE PHILADELPHIA MEDICAL JOURNAL.

Dr. Gould has been retired from the editorial management of the *Philadelphia Medical Journal*. According to a letter in the *Medical News*, January 5, 1901, from Dr. Gould, a controlling interest in the concern was obtained by a lay newspaper publisher, whereupon Dr. Gould was removed without proper notification and with unseemly haste. The cause for his removal has not been made public, nor do we think it will ever be, save by Dr. Gould himself. Learning of the proposed change at the last moment, Dr. Gould wrote a few words of farewell which, together with two other editorials, written as was the farewell, while he was yet editor, were not permitted to appear. No better medical journal was ever published than the *Philadelphia Medical Journal*. Indeed, it occupies a position, in this country at least, peculiar to itself. Whatever financial success the journal has achieved must be in large part attributed to its high standard, and that this standard is due in no small measure to Dr. Gould there can be no doubt. For the *Journal* to keep the prestige it has enjoyed under the editorial management of Dr. Gould it must maintain its high professional tone; that this will be maintained under a lay censorship is extremely doubtful.

We understand that it was because Dr. Gould insisted upon

perfect editorial independence that he was deposed. During its short life the *Philadelphia Medical Journal* has done much to benefit the profession and we sincerely wish that its power for good may continue to grow with the years. That this wish is in vain, if the editorial management is placed in the hands of one who will submit to a lay censorship, seems a foregone conclusion.

Since the above was written we have read Dr. Gould's "Protest." Tersely speaking, there was a fight among the stockholders in which the "almighty dollar" was arrayed against "ethical journalism" and the former was victorious. We predict, however, that the victory will be short lived. Many subscribers of the *Journal* renewed their subscription, paying a year in advance, without a hint as to the proposed change in the editorial management of its columns. Many will construe this, and rightly too, as a breach of faith. There is already a superabundance of medical journals, in the management of which money is the principal force. In the last issue of the *Journal*, the first under the new management, no explanation of the change in management is given. This silence may seem dignified to the present management, but it will not be satisfactory to the friends of ethical medical journalism. They will demand an answer to Dr. Gould's protest. Such accusations as are contained in this 'protest,' coming from a man like Dr. Gould, may not be treated with silent contempt. They must be answered, and satisfactorily so, or the profession will exercise the "veto power," which, as Dr. Gould remarks, it still retains. We append an extract of Dr. Gould's 'protest:'

"My communications to the Board have not been answered; no reply has been made to my written request to the Board, of December 8th, to be retained as editor with the one essential right of controlling the reading columns; my assistants and collaborators have been solicited or bespoken when the reorganization" of which I was in supposed ignorance "should take place." During the last few months effort has been exhausted to induce me to resign. When all else failed, when no excuse or complaint could be devised that would bear the light of day, and after thousands of subscription renewals of my friends should have come in on January 1st, and possibly have, I was suddenly dismissed by your Board without an hour's notice, without a reason suggested, or a motive avowed; my editorials were cut out of the last issue I had

edited, while my name, against my protest, was retained at the head of the editorial columns, and no explanation was given by another or allowed to be given by me to the subscribers or to the profession. The consolatory thought to me is that the profession still retains the veto power."

THE FALLACY OF MEDICINE.

The following is an exact reproduction of a letter recently received by one of the associate editors of the JOURNAL-MAGAZINE. Comment is unnecessary.

SPECIAL—

CHRONIC
DISEASES EYE
AND EAR.

A. G. DOWNER, M. D.
Princeton, Illinois.

SPECIAL ATTEN-

TION TO
FITTING
GLASSES.

PRINCETON, Ill., Jan. 4, 1901

G. W. McCaskey M. D.

Fort Wayne
Ind

Dear Doctor

I read your description, in *Medical Record* Dec. 29, 1900, of a case of Gonorrheal Endocarditis, and the pathological description of the case was excellent. But what conclusion or deduction do you hope to draw of this case? This man had Gonorrhoea and he was no doubt treated heroically with *strong irritating* injections and *large doses* of medicine. he seemed to be cured then heart complication. Gonorrheal Rheumatism sit in or Orchitis. may be Typhoid Fever. ulcer of stomach. But the man was cured? was he? no! no!! He was a victim of ignorant drugging zeal and he only had his Gonorrhoea *suppressed*. (cured?) driven out of sight. located in his heart. now why not in your paper draw a conclusion as to the *cause?* but you do not. Why not put up a danger signal of the injury and fallacy of such treatment. but no. I cannot see what good such papers as "yours" do (only from a pathological standpoint). Why not *warn* and *learn* physicians old and young to do better. by Omitting all astringent. strong irritating injections. And rationally treat Gonorrhoeas. but no. you know right well how tis done. bouges of Iodoform etc etc??? lotions or injections of rit Silver, Merc. Bichloride, and internally copaiba. Sandalwood

Oil. Iod. Pot, etc etc??? And the patient don't get well and runs with gleet and the patient goes *here* and *there* disgusted or he is *Cured?* like the case you describe or to say more truly *ruined* for life. legally murdered. *you have seen many such?* a case man having all history of suppressed Gonorrhea and the heart complication. (I will not go into detail) I kept him *well and going*. how? by Antidoting the *Gonorrheal virus*. how? by giving potentized virus on his tongue. i. m. potency. he one day met an allopath and told his tale of woe (mind you I had warned him to never allow any heart stimulation) This allopath says. *I can cure you*. Did he? *no Digitalis & Co.* killed him in a short time.

b case

another old sinner had been through the fashionable modes of treatment for Gonorrhea, and was left with the prettiest case of Gonorrheal Rheumatism you ever saw. *consulted me*. I antidoted the virus and *brought back the discharge* and let it run and the man got well and is today. I cure my cases, easily when they come early before being tampered with. but I have a great many who come to me after allopathic drugging of 2-4-6-8 or 10 months. why dont they cure them? why? Do I cure them? I do. any cases you cannot cure send them to me you see I am now a Homeopathist. yes thank God curing, benefitting, people under the *only* law of cure "*Cimilia similibus curantur*" try it Dr. you are evidently a man of brains and education only pocket prejudice and come out into Light.

A. G. DOWNER

NEWS NOTES AND COMMENTS

THE NECESSITY OF AMENDMENTS TO THE INDIANA MEDICAL LAW.—Dr. David W. Stevenson, of Richmond, Ind., has mailed to every member of the Indiana State Medical Society a letter in which he sets forth the reasons for amendment to the Indiana medical law, and asks that every medical man interested in having an effective medical law to write, telegraph or personally call upon his representative and explain the necessities for amendment to the present law, and urge the passage of such a bill as will be introduced by friends of the medical profession.

ADRENALIN.—This is the name of a new preparation which has recently been introduced by the well known firm of Park, Davis & Co. It is announced that adrenalin contains the active principle of the suprarenal gland, having the chemical behavior of the basic substance. It occurs in white crystalline form, is sparingly soluble in water, dissolves readily in dilute acids, and the solutions exhibit all the characteristic chemical and physiological reaction of the active principle of the gland. It is fully expected that this preparation will have a wide field of usefulness as a stimulant in heart disease, and as a depletent in the treatment of eye, ear, nose and throat diseases.

SUGGESTED MEDICAL LEGISLATION.—At a recent meeting of the Allen County Medical Society a motion was passed which carried with it the sense of the Society that an amendment to the medical law be passed, providing for the examination of all applicants for certificates to practice medicine in the State of Indiana, such examination to be given by the Board of Medical Registration and Examination, said Board to be appointed by the Governor from candidates having the endorsement of the State medical societies of the various schools of medicine represented upon the Board.

A motion was also made in effect that a bill be prepared and given to the senator from Allen county, to be presented at the present session of the Indiana State Legislature, said bill to make it a criminal offense for any undertaker to embalm a body before a death certificate has been filed by a duly authorized person.

A third motion was made and passed to the effect that it is the sense of the Society that the office of Coroner should not, under any circumstances, be held by any one not a duly qualified physician.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

THE X-RAYS IN THE TREATMENT OF CARCINOMA.—Dr. Wallace Johnson and Walter H. Merrill, B. L., in *Phil. Med. Jour.*, December 15, 1900,.)—Some cases are reported. As the object is to produce a dermatitis, the so-called X-ray burn, the static machine and the smaller coils are not applicable. The soft or low vacuum tube should be used, and its burning time determined beforehand. The healthy skin beyond the diseased tissue is protected by tinfoil. The object is to produce, in and about the diseased tissue, a burn of such depth that it will require six weeks to heal on the normal skin. The treatment is then suspended for a month, and, if complete cure is not in prospect at the end of that time, the process is continued over these parts which still resist. Photographs accompany the text, and from every standpoint the results seem to be very gratifying.—*N. Y. Med. Jour.*

AUTOINTOXICATION IN MENTAL DISTURBANCES.—Duckworth (*Lancet*, Nov. 24, 1900), calls attention to the various medical conditions that produce mental disturbances, particularly those types that can be ascribed to autointoxication, or the impregnation of the tissues with organic poison, as a result of certain habits, such as alcoholism-cocain, chloral, etc. He mentions particularly in the first class the mental disturbances of Bright's disease, of diabetes, pneumonia and other fevers, and in addition, puerperal insanity, gout, chorea, rheumatism, etc. In addition, he speaks of acute psychoses occurring in influenza, and mentions general paralysis as probably belonging to the same category. Among the organic

poisons he mentions lead (?) and alcohol, and in conclusion he speaks of the mental aberrations due to morphin, chloral, ether, cocain, etc. He thinks that the average patient nowadays is singularly intolerant of pain.—*Phil. Med. Jour.*

TREATMENT OF INFLUENZA.—Wilcox, in *Medical News*, makes the following suggestions for the treatment of influenza. When the disease attacks the respiratory system it is important to give a stimulating expectorant such as ammonium carbonate in 5 to 10 grain doses as often as may be necessary. If stimulants are required, strychnia may be employed. If the convalescence is tardy, carbonate of creosote is especially valuable. In the gastrointestinal form, a preliminary dose of calomel should be given, followed by some form of intestinal antiseptis and by doses of bismuth salts. High intestinal irrigations aid much in eliminating the toxins. In the neuromuscular type it is necessary to relieve pains. This can best be done by a combination of the coal-tar products guarded by caffein. Morphine produces bad results. The diarrhoea that often occurs should not be treated. Warm baths frequently relieve the pains and keep the skin in a good condition.—*Phil. Med. Jour.*

SEXUAL PERVERSION.—Fair (*Alkaloidal Clinic*) reports an interesting case of fetichism in a cobbler seventy years of age, who came to be catheterized on account of an enlarged prostate. He noticed that while handling a young lady's shoe this man's face assumed a rapt expression, his body was shaken by a slight tremor, and that in spite of the doctor's presence he fondled the shoe and licked it from sole to top, mumbling endearing terms. Upon questioning him it was learned that when a boy he was employed in a family with grown up daughters. He then learned that their shoes had a peculiar fascination, although the girls themselves did not interest him, and when they appeared in their bare feet they repelled him. So strong was this desire that he would leave his bed after the family had retired, procure one of the shoes by stealth and take it to bed with him. Fondling it produced a sexual orgasm with emission. So strong was this attraction that in order to have an opportunity to handle worn ladies' shoes he became a cobbler. A peculiar feature was that while all women's shoes produced

pleasurable sensations, the orgasm was always produced by shoes similar to those he used to take to bed with him when a boy.—*Medical Standard*.

FOURTEEN AND ONE-HALF ARTIFICIAL RESPIRATION IN A CHILD ONE WEEK OLD.—RECOVERY.—Keith (*Lancet*,) Nov. 24, 1900), reports the case of an infant which, because of obstructed urination, underwent circumcision when one week old. The child did not breath well under chloroform and lost more blood than usual. The physician, when called to the child during the night after the operation, found it to all appearances dead, though its heart was still beating. He at once resorted to artificial respiration, which was continued for fourteen and one-half hours with slight interruptions, and the child ultimately recovered. One of the astonishing facts about the case was that the amount of brandy which the child required was for its age enormous. A smaller amount than twenty drops every hour was tried and the same quantity at longer intervals, but the result under both conditions was the same—it at once seemed to lose ground. The brandy was never at any time thrown off by the lungs; at least, it was never noticeable in the breath, so that it is probable that the child used it all up in the struggle for its life. It is also wonderful that this small child, only a week old, was able to stand the manipulation, which did not seem to have injured it in any way. It was simply marvelous to see how quickly the marks resulting from the prolonged movements disappeared from its chest, abdomen and arms. This long cessation from natural breathing was probably caused by the combination of the chloroform, the shock, the hemorrhage and the disordered stomach, but what part each played in the pathologic condition it is difficult to determine.—*Phil. Med. Jour*.

TREATMENT OF DIPHTHERIA BY ANTITOXIN.—Park (*Archives of Pediatrics*, November, 1900), has analyzed ninety-three cases of diphtheria that were treated in the Willard Parker Hospital in two months. Of these fourteen died, or 15 per cent. Forty-two of the patients received 1,000 antitoxin units, and seven of these died, or 16.6 per cent. In this group there were seven intubations of which four recovered, and two laryngeal cases that did not require intubation, both of which recovered. Fifteen patients re-

ceived 2,000 antitoxic units, and seven died, or 13.7 per cent. Of this group there were seven intubations, four of which recovered, and four laryngeal cases not requiring intubation, all of which recovered. In the treatment of diphtheria the dose of antitoxin may be formulated as follows: In very mild cases, 1,000 to 1,500 units for the first dose. Immoderately severe cases, 2,000 to 3,000 units for the first dose. In very severe cases, 4,000 to 5,000 units for the first dose. In laryngeal cases, 2,000 to 5,000 units, according to their severity. For children under one year the author recommends about one-third less than for older children and adults. He believes that the amount of swelling of the throat and the extent and nature of the membrane are better guides to antitoxin dosage than the general condition of the patient. If at the end of twelve hours after the injection the inflammation is advancing, or if at the end of eighteen hours the inflammation has not clearly begun to subside, as shown by lessened congestion and swelling, a second dose of antitoxin should be injected. In a few cases a third dose is required at the end of twenty-four to thirty-six hours. For the bronchopneumonia and sepsis complicating some of the worst cases of diphtheria, antitoxin is generally of no avail. It is better to give too much antitoxin than too little, although moderate doses seem to accomplish as good results as very large ones.—*Phil. Med. Jour.*

CAUSES AND CURE OF INSOMNIA.—(*British Med. Jour*, Jas. Sawyer.) The hypnotic drugs are reviewed in this second lecture, and Sawyer insists on the importance of giving such only in exceptional cases and of avoiding them if possible. The risks of the administration of a powerful hypnotic are very serious and many human lives are yearly lost from this cause. He would use them only as temporary remedies when it is necessary to secure sleep at once. The patient should never be allowed to swallow chloral or any other dangerous but valuable hypnotic according to his own free will, nor should he proportionate the doses himself. He can only safely take them under medical supervision. Another important point is that an overworked individual must never be permitted to go on with his overwork and habitually secure sleep by chloral or other drugs. The sleeplessness must be attacked at its cause. Sawyer, however, advises suspicion as to accepting work as the cause of insomnia. It is mostly worry, not

overwork, or if work, work under wrong conditions. The general hygienic considerations must not be overlooked. A holiday with complete change of scene and with distinct activities will often do much to cure, and if the patient is well nourished the bromides may be cautiously employed. In the anemic cases a generous diet and alcohol as a hypnotic are sometimes useful, but there is a danger in the prescription of this great agent and we must not be negligent of our responsibility. The author notices various plans of producing sleep, such as counting, thinking of monotonous subjects, and taking deep inspirations. He thinks these are occasionally useful, but by no means invariably effective. Care should be taken that the bed covering is sufficient, but not excessive. In all cases a window should be open the year round. The head of the bed should be away from the wall. A little food taken just at the time of retiring is often effective. Sometimes a person who has been long awake will fall asleep at once after sousing his head, neck and hands in cold water, or shaking up and cooling his pillows and bed clothes and then going back to bed. In the toxic forms of insomnia we must look after a reduction of the consumption of tobacco, tea, etc., as the case may be. The treatment of gouty insomnia and that from chronic kidney disease is too extensive a subject, involving as it does the whole question of therapeutics of the maladies on which the symptom depends, to be discussed here. In the very obstinate senile insomnia the bromides with full doses of hops or heubane are the best drugs, and less harmful methods like some of the non-medicinal measures referred to may bring about sleep.—*Jour. A. M. A.*

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

COMPLETE PRIMARY AMPUTATION OF THE UMBILICAL CORD.—R. L. Dickinson (*British Med. Jour.*, September 29, 1900), makes a plea for a more scientific method of treating the umbilical cord at birth. From statistics the conclusion is drawn that many of the early weeks of infant life are due to infections through the

navel. These infections, he thinks, can be prevented by amputation of the cord and treating the resulting skin wound with a dry dressing, which must be allowed to remain undisturbed for a week. The vessels of the cord may be ligated or the cord may be cut off and the edges coated by suture and a compress applied.

537187

HIS FIRST BABY.

Hey there! You little wrigglin' chap,
Winkin' an' blinkin' on "grandma's" lap,
What do you think of all this biz?
Cute little feller, ain't he, Liz?

Say, Doc! how much d'ye s'pose he'll weigh?
Ten? Beats Jones any way.
Hully gee! What an arm that is!
Reg'lar Jim Jeffries, ain't he, Liz?

Jest watch him doublin' up that fist!
He's goin' to be a pugilist;
Or else a preacher, or else—gee whiz!
Whoops like an Indian, don't he, Liz!

Seems t' say as plain's can be,
"I'm lonesome; that's what's a troublin' me."
Lonesome, the poor little feller is!
But we'll be good to 'im, won't we, Liz?

Say, Doc, you goin'? Well, good night,
Here's twenty dollars—is that all right?
I'm satisfied, an' I'll bet she is;
Pretty good doctor, ain't he, Liz?

I'm satisfied but for jest one thing:
I wanted a girl. I did by jing!
But I guess it's all right jest as 'tis,
Better luck next time—wont we, Liz?

Chicago, Ill.

Frank L. Rose, M. D.

—*Medical World*, January, 1901.

DANGER OF WOUNDING THE BLADDER IN OPERATIONS FOR INGUINAL HERNIA IN CHILDREN.—R. H. Russell, F. R. C. S., (*Lancet*, October 20, 1900), says that inclusion of a diverticulum of the bladder in the ligature of the sac is the chief cause of mortality in operations for the radical cure of inguinal hernia in children; that without this accident the operation is devoid of danger; and that this accident is due to the teaching that the sac should be ligated and removed as "high up as possible," which he designates as the "royal road to disaster." All inguinal hernias in childhood are due to the presence of a congenital sac, and may be cured by its removal. Oblique inguinal hernia never occurs independently of a pre-formed sac.

TO REMOVE BURNT POWDER FROM THE SKIN.—(By A. Everett Smith, B. S., M. D., Olean, N. Y.)—Physicians who have had the experience of slowly picking powder burned and driven into the face by accidental or premature explosion will appreciate the following method by which it can be removed rapidly and completely in a few minutes. I do not recall reading of any one having used this method and it was only the force of circumstances by which I accidentally discovered it.

July 3, 1899, I was called to see C. S., aged about 7 years, whose face was burned and filled with powder by the explosion of a giant firecracker. I found my colleague, Dr. M. C. Follett, of this city, at the bedside, who stated that the child's eyes were probably ruined and his face would be permanently disfigured, since it would be simply impossible to pick all the powder out. Dr. Follett having an urgent call elsewhere left me to attend to the child's eyes. I soon discovered it was impossible to do anything without general anaesthesia and requested the family to have Dr. Follett meet me an hour later. It was then late in the day and darkness came on before we could meet, so we deemed it best to wait until morning:

The next morning, or some fifteen hours after the accident, we placed the child under chloroform anesthesia, and I proceeded to wash the face preparatory to the picking job, I thought was before me. Soap and water, with a coarse towel took off the blackened outside layer of the skin loosened by the burn and inflammatory process, when to my surprise I found it quite easy to wash and rub away the powder from the tissue thus exposed. After-

ward with an oily dressing to exclude the air, the case made an uninterrupted recovery with scarcely a black mark in his skin.

My conclusions are, in all similar cases, best results will be attained by leaving patient for ten or twelve hours until the serum from the inflammatory process forms, then give a general anesthesia and scrub the parts thoroughly with soap and water.—*Buffalo Med. Journal*, October, 1900.

CURAGE; TWO ADVANTAGES IT POSSESSES OVER CURETTAGE.—Stahl, of Chicago, describes (*Amer. Gyn. and Obstet. Jour.*, October, 1900,) two special advantages which the finger possesses over the curet: (1) The superior advantage of the finger in recognizing foreign bodies. (2) The superior advantage of the finger of shelling out the secundines intact, instead of the usual morselling by the curet and forceps. He reports two cases of abortion with retained placenta in which, by curage, he discovered retained tents; these would more likely have been overlooked by curettage. Aside from the arguments against the finger that it is unsurgical and septic, which experience and time have shown "not proven," it is claimed (1) that the tip of the finger cannot reach the fundus and remove all secundines; (2) curage, it is claimed, is more painful than curettage. He introduces his half hand into the vagina, and but one finger, the middle, into the uterus, for it is longer, stronger and swivels better than the others. With the index finger against the anterior lips before, and the fourth and fifth against the posterior lip behind, the uterus swivels upon the middle finger as an atlas, controlled by the fingers encircling the cervix without. Abdominal pressure as necessary is made with the other hand. He has yet to meet a uterus whose fundus he cannot reach or whose cavity he has been compelled to curage a second time for retention. Curage should not be more painful if chloroform be given; only a clumsy operation is brutal. The security of knowing that the cavity is clear and that all danger has been removed amply repays for the slight transient discomfort produced by the introduction of the half hand into the vagina.—*International Med. Mag.*, December, 1900.

BOOK REVIEWS.

• **COPLIN.**—Manuel of Pathology, including Bacteriology, the Technic of Post-mortems, and Methods of Pathologic Research. By W. M. Late Coplin, M. D., Professor of Pathology and Bacteriology, Jefferson Medical College, Philadelphia; Pathologist to Jefferson Medical College Hospital and to the Philadelphia (Blockley) Hospital; Bacteriologist to the Pennsylvania State Board of Health. Third edition, revised and enlarged; 330 illustrations and 7 colored plates. Octavo 846, pages; \$3.50 net. P. Blakiston's Son & Co., Philadelphia, Pa.

The third edition of this excellent work is in every way creditable to both author and publishers, the type, paper and binding are all of excellent quality and add materially to the serviceability of this or any other work. The colored plates, of which there are five, are works of art and are none the less valuable because reproduced from other standard works.

The subject is treated in three parts, Part I. dealing with the technic, Part II. with general pathology, and Part III. with special pathology. The first part has an excellent chapter on post-mortem examinations, regarding which the general practitioner is sadly in need of detailed information. If this chapter of thirty pages is thoroughly studied the lack will be fully supplied. The chapter on histologic methods, bacteriologic technic, microscopic examination of the urine, and the technic of sputum examination are especially full and satisfactory.

The part dealing with general pathology covers the ground very fully in some 250 pages and brings this important subject down to the present time, presenting the latest facts and discoveries along these lines.

The section on special pathology contains over 400 pages and treats in full all the pathological changes in the different tissues of the body. It is one of the best books on pathology with which the writer is acquainted and should be an especial favorite because it is the product of an American physician. The medical man who is familiar with the contents of this volume will be posted on the subject of pathology.

G. W. M.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

LAW AND INSANITY.

By H. I. SMITH, LL B.,

Lecturer on Medical Jurisprudence in the Fort Wayne College of Medicine.

Much of the controversy in courts of law over the imaginary line of demarkation between sanity and insanity might be avoided were it possible to draw such line between the two conditions and declare that all persons on one side of it are sane, and all persons on the other side insane. It is vain to think of such a division, for nature shades so imperceptibly from one opposite to the other that the human mind is too feeble to fix positively the point of transition.

Under the present state of law the real difficulty that we encounter is to place those who stand dangerously near to the borderland upon the proper side of this imaginary line, which becomes a question of as vital importance to the physician as to the lawyer; the physician being called upon to express an expert opinion upon the sanity of the individual; the lawyer having under direction the accepted theory of the investigation, and upon the result of which he must base his conclusion before the court or jury.

Read before the Allen County Medical Society at Fort Wayne, Tuesday, January 29, 1901.

Some of the writers on psychological and pathological evidences of insanity say that, owing to the advancement in knowledge on this subject, insanity is becoming better understood, and the responsibility for crime is weighing less against the unfortunate and more on the side of mercy. Is it true that medical science is solving the difficulty of determining what is, in general, insanity, by reason of the progress of knowledge on the subject in the past few years? or has humanity partially seen its folly and become more humane? Let the poet answer.

“If you can look into the seeds of time,
And say which grain will grow, and which will not;
Speak then to me. * * * * *”

If you can look into the human brain and say which one is diseased and which is not, then we may assert with some degree of confidence that science has made progress along this line.

But we must not arrogate too much knowledge, or even too much humanity for this age, for it is certain that the Greeks had apparently sound theories of its nature as a disease, and even the Egyptians recognized it as a malady and curable by medical and moral means. Later in the history of the world it was ascribed to be of divine origin, but during the middle ages the wave of superstition and ignorance sweeping over the then western world, the enlightened ideas of the Greeks and Egyptians were lost in the barbarism of the dark ages, and continued down, even to the time that the history of our own country begins. Then there was no attempt to observe the phenomena of nature and search out the laws governing the disease. Monastic and religious teaching frowned with contempt upon “the vile and despicable temple of Satan,” and ascribed its ills to diabolic origin. Many insane persons were without doubt executed as witches, or as persons who had, through witchcraft, entered into compact with the devil. At this day, looking backward to the time of Cotton Mather, it is difficult for us to say that he was not insane.

It is a striking illustration of the condition of thought at that time, and the wonderful change that has taken place since. Black art, witchcraft, diabolical possession, and the like are now only mentioned by the really ignorant. To us they have no meaning. These causes, fictitious as we now believe them to be, were invented for the purpose of accounting for many things which we now ascribe to and lay within the domain of madness. Then it

was sacrilege to dispute it, now there is nothing to deter us from entering upon the study of it by way of physical or mental research.

With all this superstition and ignorance rampant for so long, is it any wonder that strange and erroneous notions as to the causes and nature of insanity were entertained at that time? Was it any wonder that its jurisprudence was in a very defective state? The jurisprudence must necessarily advance as the science to which it is to be applied, advances.

Take for instance the discovery of natural gas, or the invention of the telephone. There was no law applicable to either while they were non-existent, but just as soon as they began to wield an influence in the affairs of men, our legislatures passed laws to foster, regulate and control the new condition that they might better serve the wants of society. So it was with the jurisprudence relating to insanity. Whenever the abnormal mental condition of man becomes better understood (if such is possible), and its influence upon the will power advances beyond mere speculation, its jurisprudence will change to meet this advancement in physical and psychological researches into the mental function.

Our present stage of medical knowledge on the subject finds us in a condition not at all satisfactory. Of late years insanity has been used to designate all mental impairments and deficiencies formerly embraced in the terms lunacy, idiocy and unsoundness of mind. About the middle of the eighteenth century, when Blackstone wrote the "Commentaries on the Laws of England," he recognized only two classes of persons requiring the protection of the law on the score of mental disorder, viz, lunatics and idiots. Witchcraft, conjuration, incantment and sorcery he denominated an offense against God and religion.

Lunatics were supposed to be much influenced by the moon, and another prevalent notion respecting them was that in a very large proportion of cases there occurred lucid intervals, when reason shone out for a while, with its natural brightness, from behind the cloud that obscured it. These intervals, it is said, are far less common than they were at one time supposed to be, and that the restoration is not so complete as the descriptions of the older writers would lead us to infer. To modern students, it signifies merely a remission of the disease, an abatement of the violence of the morbid action, a period of comparative calm.

It began to be found at last that a large class of persons re-

quired the protection of the law who were not idiots, because they had reason once, nor lunatics in the ordinary signification of the term, because they were not violent, exhibited no very notable derangement of reason, and had no lucid intervals. Their mental impairment consisted in a loss of intellectual power, of interest in their usual pursuits, of the ability to comprehend their relation to persons and things. To meet this exigency, the law stepped in and introduced to us a term, with new and extended meaning, known as *non compos mentis*, or unsoundness of mind. This has become a generic term, including all the species of madness, whether it arose from idiocy, lunacy or sickness, or other mental derangement, without regard to the cause or duration of the malady. It would seem that it has been carried to its extreme limit, for there are no phases of insanity but what has been dealt with by our courts of law. The law writers have attempted to classify and distinguish them, but without apparent success. Even somnambulism has recently found its way into court as a defense to a prosecution for homicide. The ground was taken that the accused, at the time of the killing, was incapable of entertaining a criminal intent. (See *Fain v. Commonwealth*, 78 Ky., 183; 1. c. 39, Am. Rep. 203).

The law has never held that all lunatics and idiots are absolved from all responsibility for their civil or criminal acts. This consequence was attributed only to the severest grades of these affections. Theoretically the law has changed but little on this subject for years, but practically it exhibits considerable improvement; that is, while the general doctrine remains unchanged, it is qualified, in one way or another, by the courts, so as to produce less practicable injustice.

It will be seen, therefore, that it is a doubtful proposition to attempt to define insanity or even to indicate its essential element, for the reason that the present state of knowledge does not permit it. For our purpose, and for all practical purposes as well, a definition is unnecessary, for the real question that confronts a court is not what constitutes insanity in general, but wherein consists the insanity of this or that individual.

Neither sanity nor insanity can be regarded as an entity to be handled and described in courts of law, but rather as a condition to be considered in reference to another condition. It is observable by all that men vary in the character of their mental manifestations, insomuch that conduct and conversation perfectly

proper and natural in one might in another differently constituted be indicative of insanity. In determining, therefore, the mental condition of a person, he must not be judged by any arbitrary standard of sanity or insanity, nor compared with other persons unquestionably sane or insane. He can properly be compared only with himself. If some forcible writer on scientific subjects would quit pure English and descend to the use of language, such as is attributed to David Harum, you would conclude with me that his mind had become suddenly affected, while we would not think that David's mind was affected in the least, but quite the contrary, that he was exceedingly of sound mind. Therefore, when one, without any adequate cause, adopts notions he once regarded as absurd, or indulges in conduct opposed to all his former habits and principles, or changes completely his ordinary temper, manners and dispositions—the man of plain practical sense indulging in speculative theories and projects—the miser becoming a spendthrift, and the spendthrift a miser—the staid, quiet, unobtrusive citizen becoming noisy, restless and boisterous—the gay and joyous becoming dull and disconsolate even to the verge of despair—the careful, cautious man of business plunging into hazardous schemes of speculation—the discreet and pious becoming shamefully reckless and profligate—no stronger proof of insanity could be had. And yet not one of these traits, in and by itself alone, disconnected from natural traits of character, could be regarded as conclusive proof of insanity. In accordance with this fact, the principle has been laid down, with the sanction of the highest legal and medical authority, that it is the prolonged departure, without any adequate cause, from the states of feeling and modes of thinking usual to the individual when in health, which is the essential feature of insanity. Still we have no absolute proof even of the truth of this rule.

The disposition toward the insane had sunk to its lowest level during the time of Lord Hale. We read now of the times with a degree of amazement. But when we note that the Bible declares that there shall not be suffered a witch to live, we look back and say that it was the fault of Lord Hale's education. When he was taught such doctrine from Holy Writ, why should he dispute it? He invaded the realm of insanity and laid down one of the harshest rules that ever fell from the bench. He said "that partial insanity will not absolve a person from responsibility for his criminal acts." I suppose that the humanity of the rule was equal to the humanity of the times.

The principle thus laid down by Lord Hale was followed in the English courts for three quarters of a century, and received its fullest application in 1723, in the trial of Arnold for shooting at Lord Onslow. It was admitted that Arnold was a lunatic, but Justice Tracy declared that "it is not every kind of frantic humor, or something accountable in man's actions, that points him out to be such a madman as is exempted from punishment; it must be a man that is totally deprived of his understanding and memory, and doth not know what he is doing, *no more than an infant, than a brute or a wild beast*; such a one is never the object of punishment."

We must give them credit, however, for maintaining a wide distinction in law, between civil and criminal acts. It would not exempt from punishment for criminal acts unless the reason was entirely wanting. In civil affairs it invalidated all his contracts, torced him under guardianship, and deprived him of the management of himself and his estate, and this, too, even though his insanity be only partial.

Then "a man's intellect might not be sufficient to enable him to conduct his affairs, and to dispose of his property, though quite sufficient to make him responsible for his criminal act." It was right to hang for murder one who was not thought fit to take care of himself and his affairs.

This same question came up again in 1800, in the Hatfield case, when Lord Hale's doctrine was discredited for the first time, and a new doctrine enunciated. Mr. Erskine, who was counsel for Hatfield, argued forcibly that if the "wild beast" theory was accepted in its literal sense, there was no such madness ever existed in the world, *and that delusion is the true character of madness*. There was no question about Hatfield's insanity, and that his act was the product of his madness, but the triumph of his acquittal was attributed to the eloquence of Mr. Erskine.

Twelve years later, in Bellingham's case, the same question came up before Lord Mansfield, who declared upon the "authority of the first sages in the country, and upon the authority of the established law of all times, which has never been questioned, that although a man might be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess mind capable of *distinguishing right from wrong*."

The test of responsibility was here changed from the "wild beast" theory to the "capability of distinguishing right from wrong," and this without Lord Mansfield acknowledging it.

Now we find two theories acted upon; the existence of delusion instigating the criminal act, and an absence of knowledge of right and wrong. The old "wild beast" theory had become a too violent shock to the moral sensibilities of mankind, and the courts gradually abandoned it, leaving no settled principle or uniformity of practice, and no certainty of a humane result.

In this uncertain way matters went on until a great sensation was made in 1843, by the murder of Mr. Drummond by McNaughton. Mr. Drummond was the private secretary of Sir Robert Peel, premier of England, and McNaughton, by mistake, took him for the premier himself. McNaughton was laboring under the influence of a delusion that the premier was one of a number of persons whom he believed to be following him everywhere, blasting his character and making his life wretched. As far as his business transactions were concerned, it seems that McNaughton had shown no obvious symptoms of insanity in his ordinary discourse and conduct. He was acquitted on the ground of insanity, and his acquittal caused so much excitement in England that the House of Lords propounded questions to all the Queen's judges, which drew forth the response, and as restated by Lord Chief Justice Tindal, is, as follows:

"The jurors ought to be told in all cases that every man is presumed to be sane and to possess a sufficient degree of reason to be responsible for his crimes until the contrary be proved to their satisfaction; and to establish a defense on the ground of insanity, it must be clearly proved that, at the time of committing of the act, the party accused was laboring under such defect of reason; from disease of the mind, as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong."

It ought not to escape attention that "the knowledge test of right and wrong," in the abstract, was here abandoned, and allowed to go the way of the "wild beast" test. The question of right and wrong was now coupled with the particular act with which the accused was charged. And in addition to that, it was put in reference to the particular act at the time of committing it. Then the question sought to be answered under this rule is: Did he, at the time, know the nature and quality of the act he was doing?

It was a great improvement over the old rule, for, if strictly applied, it would cover and excuse many acts of insane violence.

It was a move in the right direction; or rather, it was continuing the move in the right direction. The English courts still follow this rule, but a majority of the American jurisdictions do not take kindly, even to this apparently humane modification. They do not deem the answer of the English judges entirely satisfactory, for it practically holds a man confessed to be insane accountable for the exercise of the same reason, judgment, and controlling mental power that is required in perfect mental health. It is an unhesitating assumption that a man having an insane delusion has the power to think and act in regard to it reasonably; that at the time of the offense he ought to have and to exercise the knowledge and self-control which a sane man would have and exercise, were the facts with respect to which the delusion exists, real; that he is, in fact, bound to be reasonable in his unreason, sane in his insanity. It is in effect saying to the jury, the prisoner was mad when he committed the act, but he did not use sufficient reason in his madness.

In the case of Boardman v. Woodman, a case that came before the Supreme Court of the State of New Hampshire (47 N. H. 120), Judge Doe, speaking in a dissenting opinion, has given to this country a position far in advance of any other country on the subject of insanity as a defense to crime. He broke away from the inhuman doctrine as enunciated by the old sages of the law, and endeavored to correct this inhumanity, and put in a better light the relation of medical observation and law in questions of mental disease, and future progress has been along the path which was then marked out.

"It was for a long time supposed," said Judge Doe, "that men, however insane, if they knew the act to be wrong, could refrain from doing it; but whether that suspicion is correct or not is a pure question of fact; in other words, a medical supposition—in other words, a medical theory. Whether it originated in the medical or any other profession, or in the general notion of mankind, is immaterial. It is as medical in its nature as the opposite theory. The knowledge test in all its forms, and the delusive test are medical theories introduced in immature stages of science, in the dim light of earlier times, and subsequently, upon more extensive observation and more critical examinations, repudiated by the medical profession. But legal tribunals have claimed these tests as immutable principles of law, and have fancied they were abundantly vindicated by a sweeping denunciation of medical the-

ories, unconscious that this aggressive defense was an irresistible assault on their own position. In this manner opinions purely medical and pathological in their character, relating entirely to questions of fact, and full of errors, as medical experts now testify, passed into books of law, and acquired the force of judicial decisions. Defective medical theories usurped the position of common law principles. Whether the old or the new medical theories are correct, is a question of fact for the jury; it is not the business of the court to know whether any of them are correct. The law does not change with every advance of science; nor does it maintain a fantastic consistency by adhering to medical mistakes which science has corrected. The legal principles, however much it may formerly have been obscured by pathological darkness and confusion, is that a product of mental disease is not a contract, a will, or a crime. It is often difficult to ascertain whether an individual has a mental disease, and whether an act was the product of the disease; but these difficulties arise from the nature of the facts to be investigated, and not from the law; they are practical difficulties to be solved by the jury, and not legal difficulties for the court."

The question, therefore, as is now submitted to the jury in most jurisdictions in this country, as it arises in courts for their determination, following the dictum of Judge Doe, is: *Was the act the offspring or product of mental disease?* Any other test, they claim, is clearly wrong, for it is an interference with the province of the jury. Until science is able to delineate and fix absolutely the condition of mind, it is doing in regard to insanity what it did formerly in regard to witchcraft—giving erroneous opinions in matters of fact to the jury under the name of law, and with all the weight of judicial authority. In one of the latest trials for witchcraft in England, Lord Hale, whose crude dicta concerning insanity were so long acted upon in courts of justice, instructed the jury, "that there are such creatures as witches he made no doubt at all. For, first, the scriptures hath affirmed so much; secondly, the wisdom of all nations hath provided laws against such persons, which is an argument of their confidence of such a crime." The jury accordingly found a verdict of guilty; the judge, satisfied with it, condemned the prisoner to death, and he was executed. It was one of the last executions for witchcraft in England, for it occurred at a time—and this should never be forgotten—when the belief in witchcraft was condemned by the

enlightened opinion of the country. As it was then with witchcraft, so is it now in a great measure with insanity; the judge instructs the jury theoretically on matters of fact; they find accordingly a verdict of guilty; he is satisfied with the verdict, and an insane person is executed.

It is gratifying to note that the dissenting opinion of Judge Doe has since been adopted as the law in the State of New Hampshire, holding, in effect, that it is for the jury, under suitable instructions of the court, to find the existence of insanity and to determine its effect on the party's acts. (State v. Pike, 49 N. H. 399; 1. c. 6 Am. Rep. 533; overruling Boardman v. Woodman, 47 N. H. 120, and thereby adopting the humane doctrine laid down therein, in Judge Doe's dissenting opinion. Indiana is gradually leaning toward and adopting the views above stated. Grubb v. State, 117 Ind. 277. Maine likewise. See Robinson v. Adams, 62 Me. 369; s. c. 16 Am. Rep. 473).

Let it be said, however, to the glory of most of our commonwealths that they are loosening themselves gradually from the attempt to define the condition of responsibility in criminal cases, and very wisely leaving each case to be decided on its merits. They even ought to go farther than that and say that where the question of insanity of the prisoner is raised no capital punishment must be inflicted. This might lead you to ask me the question whether this would not have a tendency to exempt from punishment the individual having insane tendencies in a particular line, who, nevertheless, commits a crime which is in no way connected with his insanity; and who, in fact, so far as can be judged, does it in the same way and from the same motive as a sane person? Should such a person escape the severest punishment for what he has done? I answer, that if it is possible for science to determine beyond cavil the question whether the act done was not the offspring or product of mental disease, then, perhaps I ought to answer you in the negative; but I am persuaded that science is unable to fix a point dividing responsibility from irresponsibility, and until that becomes possible, which I fear never will be, there will be no end to judicial murders, as long as capital punishment is allowed to remain on our statute books. It is asking too much of humanity to administer equal and exact justice to all alike, because mind differs. Whenever all the administrators of law and justice are alike in thought and action, then we may attempt to apportion the exact measure of an individual's responsibility. But

will that ever be? We ought not rest satisfied with a rough standard of justice; rather a humane standard of justice, looking in its application to the great interests of society, and let it operate as such, but not inflicting punishment in order to deter others from crime. An English judge, in sentencing a prisoner to death for sheep stealing when death was the punishment inflicted, with the object, but without the effect, of deterring persons from stealing sheep, is reported to have said: "I do not sentence you to be hanged for stealing sheep, but in order that sheep may not be stolen." Another English judge, when sentencing to death, for murder, a madman, on whose behalf insanity had been unsuccessfully pleaded, said that he was not sure whether it was not more necessary to hang an insane person than a sane person. The opinion, barbarous as it seems, was evidently based upon the belief that it was necessary in the interests of society to deter insane persons from committing murder, and that the execution of them would act as a warning to other madmen, and so deter them, if not from going mad, at any rate, from committing murder when they were mad. If this were so, it would be a matter of just surprise that the practice of confining lunatics in asylums has not availed to deter them from going mad. The dictum of the judge entirely ignores the real nature of insanity as a disease. The victim was certainly not altogether responsible for his condition, and which undoubtedly may have rendered him irresponsible for his deed.

"Hamlet is of the faction that is wronged;
His madness is poor Hamlet's enemy."

Were one-half of the lunatic population of the country hanged the miserable spectacle would have no serious effect upon the remaining half, and certainly would not deter a single insane person from committing murder, any more than convulsions would be prevented from occurring henceforth by hanging all persons who fell into convulsions. If a boy in school were to make faces and do antics, punishment might have its effect on him and act as a deterrent to others, but would it have any deterrent effect upon the boy whose grimaces and antics were produced against his will? You answer with me, certainly not, but, on the contrary, it would most likely aggravate them. The one then would be the proper object of punishment, the other a sad object of compassion, whom it would be cruel to punish.

Hanging madmen then as a deterrent is folly. If we had no other way of protecting society it might become a necessity to resort to this abuse, but we have a remedy; a most effectual remedy; by detaining him in a hospital for the criminal insane. This would be as much of a deterrent to him as hanging, but neither would be effective. You ask me, would it not be effective against the sane man? I answer, no. A sane man does not require such an example. Abolish capital punishment and the dispute between lawyers and doctors cease to be of practical importance. When a capital crime has been perpetrated by one whose sanity is called in question, commit him to a proper hospital, and treat him for a diseased mind, but do not murder him in the name of the law.

CRIMINALS FROM THE STANDPOINT OF A PHYSICIAN.

By DR. W. D. CALVIN,
Fort Wayne, Ind.

The criminal is not one of the least interesting classes of society. The fact that he is one of the many classes of mankind and accepting Pope's statement, in his "Essay on Man," that "the proper study of mankind is man," entitles him to consideration. Again, thanking Pope for his words, let us say after him, "What can we reason but from what we know? Of man, what see we but his station here, from which to reason or to which refer?"

The criminal is either a by-product of civilization or a relic of barbarism; therefore, of both historical and social interest; he is either created into a criminal after birth or conceived and bred a criminal. It does not, however, follow that because his general tendencies are criminal that he is void of all good.

Once while crossing the old "Michigan and Illinois Canal," that waterway black and foul with the sewage of Chicago, I looked down upon the surface of that stream of stench and saw there mirrored the beautiful skies and floating fleecy clouds that composed the firmament above. I noted that the stream could reflect things beautiful at least, and when I passed on, made my professional visits to the laborers who were constructing the new drainage canal this similarity was apparent. These men were in the main composed of most degraded classes of humanity, who had no regard comparatively for civil, moral or hygienic laws, yet

their lives would, like the foul "Michigan and Illinois Canal," at times reflect or show forth some principles of life worthy of existence. Understand, therefore, that the writer does not overlook the fact that there is not of good in every human being, but, as the poet says, "Vice is a monster of so frightful mien; as, to be hated, needs but to be seen; yet seen too oft, familiar with her face, we first endure, then pity, then embrace." The history of the by-product criminal is condensed in those lines, and it is to this class and the born criminal, not the occasional, that your attention is called, and, rather to ask the question than to answer it, what can, from a prophylactic standpoint, be done with this class to protect this and future generations?

The question of a general development of mental man is one of great moment. A departure from the governing principles may result in a genius of one generation being the progenitor of a gradual line of mental degenerates. Maudsley, in his "Physiology and Pathology of the Human Mind," gives several instances in which the father has toiled upward from poverty to vast wealth. He says: "I have witnessed the results in a mental and physical degeneracy which has gone as far as the extinction of the family in the third or fourth generation. When the evil is not so extreme as vice or madness, the savor of a mother's influence having been present, it may still be manifest in an instinctive cunning and duplicity or an extreme selfishness of nature, a nature not having the capacity of a true moral conception or altruistic feeling."

Maudsley claims that the extreme passion for getting rich, or any other passion absorbing the whole energies of a life, does predispose to mental degeneration in the offspring, either to moral or to intellectual defect, or to outbreaks of positive insanity.

Thus we see that the development or over-development of man in a single line puts in disorder the equilibrium of the human mind, as seen by posterity. This being admitted, what would you expect of posterity when the progenitors had developed some criminal characteristic to the exclusion of most else?

Whenever the subject of heredity is referred to there is danger of being misunderstood, and to the mind of a listener who has considered the question but superficially, will come illustrations of the exceptions to the principle, which, if he will but remember that one method of proving a rule is by noting that the exceptions are fewer than the applications, and that the fewer the exceptions the stronger the rule, there will be less danger of any

misunderstanding. Also note that the writer is willing to place environment on the same plane with heredity, and realizes that in individual cases one may be much more manifest than the other, in fact, in extreme cases, become so predominating as to be *the* ruling principle, but that their respective influence, as exerted upon mankind, is approximately equal. The mistake in the past has been that the principle of heredity, as applied to mankind, has neither been sufficiently recognized nor applied. The scientific breeder, the progressive farmer, and the enterprising gardener have recognized and applied this principle to a much greater extent than have the masses of humanity applied it to the propagation of the human species, and to the sentimental conservatism that is associated with the "penny wise and pound foolish" question, "personal liberty," is this due. Do not understand that I would underestimate "personal liberty," but when "personal liberty" allows an individual to do wrong or become a nuisance and menace to mankind, then the interests of mankind as a society should be the point at issue.

The heredity to the tendency to thieving is generally admitted. Dr. Despine *calls attention to the Cretien family* in his Physiology.

Jean C., the common ancestor, had three sons—Prine, Thomas and Baptiste. (1) Prine had a son, Jean Francois, who was condemned for life to hard labor for robbing; (2) Thomas had two sons, Martin, condemned for murder, and Francois, condemned for the same cause; Martin's son died in Cayenne, whither he had been transported for robbery; (3) Jean Baptise had one son, Jean Francois, whose wife was Marie Fame, belonging to a family of incendiaries, and this son, Jean Francois, had seven children—(1) Jean Francois, Jr., found guilty of several robberies, died in prison; (2) Benoist fell off a roof, which he had scaled for an unlawful purpose, and was killed; (3) Chain, a robber; (4) Marie Reime died in prison a thief; (5) Marie Rose, same fate; (6) Victor, now in jail for theft; (7) Victorienne, whose son was condemned for murder and robbery.

Enrico Ferri, Professor of Criminal Law in the Italian Parliament, says "While criminality continues to grow and the punishments hitherto inflicted, though they can neither protect or indemnify the honest, succeed in corrupting and degrading evil-doers." And while our codes and treatises lose themselves in the fog of legal abstractions, we feel more strongly every day in

police and assizes the necessity for these biological and sociological studies of crime and criminals, which, when logically directed, can throw light as nothing else can upon the administration of the penal law."

Criminal anthropology, while having received a recent impetus in study and investigations, is not young, for as prosely said by Pascal and poetized by Pope, the statement is true that man has always been the most wonderful object of study to himself. Plato made comparisons of the human face and character with those of the brutes, and Aristotle still earlier observed the physical and psychological correspondence between the passions of men and their facial expression, but of the more recent investigators none exceed Darwin.

The criminal anthropologist and sociologist must also be a student of histology and physiology. These men have made some very extensive and thorough investigations and observations that those of us who have not investigated can as well accept as we did the use of anti-toxine, anti-septic and vaccination. They have observed that in criminal murderers and thieves an incontestable inferiority has been noted in the shape of the head by comparison with the normal man, together with greater frequency of hereditary and pathological departures from the normal type. Similarly the examination of the brains of criminals, while it reveals in them an inferiority of form and histological type, gives also in a great majority of cases indications of disease which were frequently undetected during life.

As in natural history, we advance by degrees and shades from the inorganic to the organic creation, so in criminal anthropology we pass by degrees from the mad to the born criminal, through the link of moral madness and epileptics, and from the born criminal to the occasioned, through the link of the habitual, who began by being an occasioned criminal and ends by acquiring and transmitting to his children the characteristics of the born criminal. It does seem wrong to judge a criminal according to the crime he has committed without knowing his personal characteristics and the circumstances of his environment.

Criminal sociology recognizes three things, the crime, the criminal, and the means best calculated for self-defense.

It is undoubtedly true that in large measure up to the present time that the administration of justice in our lower courts have

judged and punished crime in the person of the criminal, but that the courts are more and more seeing the necessity to judge the crime and criminal, and especially is this true in our higher courts, where the sociological principles are better understood, especially that heredity plays as fully an important role as environment.

The congenital character and hereditary transmission of criminal tenderness in some individuals fully justify the words, "Moral diseases are like physical diseases; they are contagious or epidemic or hereditary." The greater number of crimes come from a comparatively few families, which need a special supervision and isolation like that, we impose upon those suspected of carrying germs of infection.

This is the explanation of Plato's idea, who, admitting the principle that children ought not to suffer for the crimes of their parents, yet putting the case of a father, a grandfather, and great-grandfather who had been condemned to death, proposed that their descendants should be banished as belonging to a class of incorrigibles.

The psychology of the criminal is summed up in a defective resistance to criminal tendencies and temptations due to that ill-balanced impulsiveness which characterizes children and savages, and, according to the most authentic authorities, there are about 50 per cent. of all criminals born with this condition.

A very large percentage also are walking, setting examples of specific diseases that have gone untreated and are a menace to all that portion of humanity and posterity with whom they may come in contact.

The question is not only for the legal and medical professions, but for all mankind. Would not society be justly protecting itself both morally and physically were it to prevent the propagation of such species of humanity, even though the surgeon and banishment were indulged to the fullest?

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

PHYSICIANS' ORPHANS' HOME.

An appeal to the profession throughout the country is now being made through a medical organization at Bristol, Tenn., for assistance in a work of charity which deserves the support of every one, not alone because he is a member of the profession, but upon the broad ground of humanity. It is intended that \$35,000 to \$50,000 be subscribed for the establishment of a proposed orphans' home, to be located at Bristol, Tenn., which shall be used primarily as a home for dependent children of deceased members of the medical profession. The maintenance and education of these little ones appeals earnestly to the generosity of the grandest profession in the world, and what is proposed in this connection will live not alone as a monument to the profession, but will stand as a shield, warding off distress from some of our own children, it may be from posterity.

A large committee of reputable physicians has been formed to bring the matter to the attention of the medical profession throughout every portion of the United States, and it is hoped that there will be a generous response to the call for financial aid. No subscriptions are payable until at least \$35,000 has been pledged. All correspondence, as well as subscriptions, should be addressed to N. H. Reeve, M. D., Secretary, Bristol, Tenn.

SMALLPOX—ERRORS IN DIAGNOSIS.

It would hardly seem necessary to call attention to the fact that "an ounce of prevention is worth a pound of cure" in the management of cases having a suspicious resemblance to smallpox. The letter from the Secretary of the State Board of Health of Ohio to the Secretary of our County Board of Health, herewith published, throws light upon the question as to the origin of the existing cases of smallpox in the city of Fort Wayne.

An investigation disclosed the fact that the young man named Judy, mentioned in the letter, had all the typical symptoms of smallpox and died of that disease, though the attending physician gave a certificate to the effect that death had been caused by purpura hemorrhagica. The body was buried in Ohio, after a public funeral, and this accounts for the cases reported by the Secretary of the Ohio Board.

There is, however, another side to the story. The young man supposedly dying of purpura hemorrhagica, came in contact with several people in Fort Wayne, and some of the cases of smallpox now existing in the city since the receipt of Dr. Probst's letter, have been traced to him. It is therefore quite evident that an error in diagnosis has been responsible for not only three deaths, but perhaps disfigurement of twice as many more individuals. The letter from the Ohio State Board of Health is as follows:

"State of Ohio—State Board of Health. Office of the Secretary. Columbus, Ohio, February 12, 1901.—Dr. Carl Proegler, Health Officer, Fort Wayne, Ind. Dear Doctor:—I investigated a case of smallpox to-day which seems to be traceable to your city. It appears that a young man, about twenty years old, by the name of Judy, whose parents live near Logan, O., was working in the Penn. car shops in Fort Wayne last December and was boarding with a family named Truchet, at 40 Buchanan street, Fort Wayne.

During the latter part of December he was taken ill, called on some physician in Fort Wayne, whose name I do not know, who told him he thought he had grip, and advised him to go home and to bed. He went home and was sick for five days, during which time the doctor did not see him, though he sent him medicine several times. About the fifth day of his illness the young man died unexpectedly, and the doctor, I think the same one who had given him medicine, was hurriedly sent for, came, saw him after death, and reported, so I am told, that he died of purpura hemorrhagica. The body was sent home for burial and was received December 31. The coffin was opened and a public funeral held on January 2, a large number of persons being present. Apparently nothing developed from this exposure, but a brother of the deceased, who opened up the effects and wore some of the clothing of the dead brother, was taken sick about twelve or thirteen days after that time, and after a sickness lasting seven or eight days, with symptoms of smallpox, he died. The third brother I saw to-day. He has been ill a little more than a week and has a very-malignant form of smallpox, and it looks like he would die, too.

"The case is an interesting one, and I should like to have any information you can give me as to the possibility of the first case having contracted smallpox in Fort Wayne, and whether there have been any developments in the Truchet family, or others who were exposed to this person.

"If this was a case of smallpox, it would also be interesting to know whether the body was embalmed or prepared any other way for shipment, because it is quite remarkable that several hundred people should have been exposed to this body, and that no cases of smallpox, if the disease was smallpox, should have developed. Yours truly, C. O. PROBST, Secretary."

THE PATHOLOGY OF MENIERE'S DISEASE.

At the Atlantic City meeting of the American Medical Association last year the writer reported in the neurological section a case in which the symptom complex of Meniere's disease was the result of gastro-intestinal disease acting in a reflex manner or secondarily in the production of a toxæmic state. In a recent number of the *Berliner Klinische Wochen*, Rieken reports four cases, the study of which leads him to conclude that the syndrome

above referred to is frequently due to such conditions. It is true that in my case there was evidence of middle ear disease, but the middle ear disease remained just the same after curing the gastrointestinal disorder, while the vertiginous attacks disappeared, which furnishes proof as strong as can be obtained by clinical methods, of the relationship existing between the gastro-intestinal disturbances and the clinical picture of so-called Meniere's disease. It appears to me from a careful study of several cases of this type that the mechanism by which the cerebral symptoms are produced is complex and probably multiform in character. As is pointed out in the paper above referred to, we have nervous channels of communication through which reflex disturbances of the cerebro circulation might easily be produced by causes acting upon the digestive tract. While vascular changes of this sort have not, so far as I know, been demonstrated from causes acting through these particular channels, they have been demonstrated through analogous paths in a manner which leaves no doubt of the possibility of their occurrence here. For instance, Schueller exposed the pia mater and subjected the skin to thermal stimulation and was able thus to demonstrate variations in the size of the pial vessels, upon which the vascular supply of the brain cortex is absolutely dependent. Such changes, it is perfectly plain, could only be the result of nervous impulses acting through the peripheral nerves conveyed to the spinal centers, and from these by commissural fibers to the vaso motor mechanism controlling the pial circulation.

The more carefully this subject is studied the more probable it becomes that these explosive vertiginous attacks characteristic of Meniere's disease are not necessarily dependent upon a lesion of the auditory apparatus, although it is still an open question if the causes do not act either through this particular mechanism or through its higher or cortical representation. If this position is tenable, then we may look in other directions as well as in that of the gastro-intestinal tract for conditions which may in some manner disturb the function of the nervous organs above referred to and possibly be responsible along with internal and middle ear disease, disease of the central nervous system, and gastro-intestinal disorders for the production of the syndrome known as Meniere's disease.

M'CASKEY.

NEWS NOTES AND COMMENTS

PLAY WHAT YOU GET.

Life is a game of whist. From unseen sources
The cards are shuffled and the hands are dealt;
Blind are our efforts to control the forces
That, though unseen, are no less strongly felt.
I do not like the way the cards are shuffled;
But still I like the game and want to play.
Thus through the long, long night, will I, unruffled,
Play what I get until the break of day.

Eugene Ware.

The Equitable Record—Winter Number.

SYMPATHY.

“It is little:

But in these sharp extremities of fortune,
The blessings which the weak and poor can scatter
Have their own season. ‘Tis a little thing
To give a cup of water; yet its draught
Of cool refreshment, drain’d by fever’d lips,
May give a shock of pleasure to the frame
More exquisite than when nectarean juice
Renews the life of joy in happiest hours.
It is a little thing to speak a phrase
Of common comfort, which, by daily use,
Has almost lost its sense; yet, on the ear
Of him who thought to die unmourn’d, ’twill fall
Like choicest music; fill the gazing eye
With gentle tears; relax the knotted hand
To know the bonds of fellowship again;
And shed on the departing soul a sense
More precious than the benison of friends
About the honored death bed of the rich,
To him who else were lonely, that another
Of the great family is near and feels.”

Thomas N. Talfourd.

The Equitable Record—Winter Number.

DR. JOHNSON'S SARCASTIC POEM.

The parson points the way to heaven ;

And then, with tender care,

The doctor consummates the work.

And sends the patient there.

Am. Jour. Surg. & Gynecol., January, 1901.

THE AMERICAN WAY.

The Frenchman likes his native wine,

The German likes his beer,

The Irishman likes his whisky straight

Because it brings him cheer ;

The Englishman likes his half-and-half

Because it brings him dizziness ;

The American has no choice at all—

He drinks the whole blamed business.

DR. McCASKEY DELIVERS AN ADDRESS AT TOLEDO—*The Cleveland Journal of Medicine* for January, 1901, contains the following item: Dr. G. W. McCaskey, of Fort Wayne, President of the Indiana State Medical Society, on November 23rd, delivered an address upon "Early Diagnosis of Gastric Cancer" before the Toledo Medical Association.

MEDICAL AND SURGICAL EXPERIENCES IN THE SOUTH AFRICAN WAR.—The Lambart Pharmacal Company, of St. Louis, have recently issued an exceedingly artistic and interesting pamphlet containing the addresses before the Toronto Clinical Society and Canadian Medical Association, by Lieutenant Colonel G. Sterling Ryerson, M. D., lately British and Canadian Red Cross Commissioner with Lord Roberts' headquarters in South Africa, detailing many of the medical and surgical experiences in the South African war. The papers are very interesting and in their attractive appearance in book form are worthy of preservation.

PHYSICIANS ASKED TO ADVOCATE TEMPERANCE. — The National Woman's Temperance Union has issued a formal appeal to the physicians of the United States, asking that the medical pro-

fession, individual and collectively, use influence as far as possible toward the elimination of alcohol in any and all of its forms from the prescribed treatment of invalids, and to warn the people regarding the injurious effects of alcohol beverages upon the human economy from a physiological standpoint. Physicians are asked to discuss before their medical meetings the question of physiological effects of alcohol upon the system so that physicians and others will be benefited and the position which advanced medical men take upon this question be sustained and strengthened.

DEATH OF DR. FRED JENNER HODGES.—We have just received the sorrowful news of the death of a former associate editor of the MEDICAL JOURNAL-MAGAZINE, which occurred at Chicago on Monday, February 18th. The following account has been clipped from the *Ashland Daily Press*, which has just reached us:

“Dr. Fred J. Hodges died this morning at 11:30 o'clock from the effects of blood poisoning caused by poison entering the middle finger of his right hand while performing an operation five weeks ago last night at 8 p. m. The poison entered his system through a needle prick in the middle finger. Miss Mollie Chesley, a sister of Mrs. Hodges, and her mother, Mrs. T. M. Chesley, leave tonight for Chicago, and the funeral and interment will take place in Anderson, Ind., where Dr. Hodges' mother and one child are buried. Besides the sorrowing wife, three children are left—Theodore, age 5, and the twins, Paul and Virginia, ages 8. Virginia is now dangerously ill at Rinehart's hospital, having been ill for eight weeks with typhoid fever, and her brother Paul has had the same disease for three weeks. Dr. Hodges' aged father is also in Ashland, but he is too feeble to stand the trip to Anderson.

“As previously stated, the poison entered the circulation through the finger, which had been accidentally pricked by a needle. There was no abrasion on the hand. Early next morning after the operation the place on his finger which had been pricked by a needle was inflamed. At 10 o'clock that morning a chill set in, lasting two hours. His temperature became high and violent, and on Tuesday a red line from the point on his finger extended up the arm and across the body. All the glands of the body and the liver and spleen became affected. His brother-in-law, Dr. Rinehart, who attended him, says that this was the only day during his sickness at Ashland that he considered Dr. Hodges to be in danger of

dying. On Wednesday the red line faded, and the swelling of the glands began to go down. An abscess formed in the forearm, and this was operated on, and all the dead tissues were taken out. From this time he gradually improved until the tenth day, when there was no more fever. He felt that he was well, and even visited Dr. Rinehart at the hospital for two or three hours. The next day he was still better and so on for two or three days. On the 30th of January, Dr. Hodges made up his mind to go to Chicago to rest up for a few weeks with a relative. He became worse immediately upon his arrival at Chicago. The disease had apparently settled in his liver. His fever immediately rose, and vomiting, with repeated attacks of pain, followed. The second day after arriving at Chicago his temperature had raised to 106. It ranged from 103 to 106 until a week ago to-day, and he was unconscious much of the time. He improved slightly, but last Friday his temperature went back to 106, he became violently delirious, remaining in this condition most of the time until his death this morning.

"Dr. Hodges was a large, powerful man, weighing 200 pounds. He was a lover of out-door sport, and was an enthusiastic lover of base ball. He was also a musician of considerable ability. He was a member of the Masonic lodge, Knights of Pythias and Elks lodge, and had considerable life insurance, having increased his insurance with a \$2,000 policy only five days before his sickness. He was born in Lansing, Mich, thirty-six years ago. graduated at the University of Michigan, and the Chicago Medical College. He was an assistant of the famous Dr. Senn for two years, physician for the Cook County hospital for eighteen months, and had a general practice in Chicago. He married Miss Josephine Chesley in Chicago, and removed to Anderson, Ind., and from there to Ashland four years ago. Up to the time of his death he was a partner of Dr. Rinehart in their general practice.

"The public has been greatly interested in this case. That a strong young man, splendidly endowed for life, should be cut off by this dreadful disease in the short space of a month, leaving a wife and family, is indeed sad, and the many who knew him as a man of unusually ability, a public spirited citizen, and a friend, have watched from day to day for some sign of encouragement, and to-day their hearts go out to the widow and orphans."

Dr. Hodges numbers his warm, personal friends in Indiana by the score, having been personally known to a large number of

the medical fraternity throughout the entire state, and having held many positions of honor and trust as a mark of esteem and confidence with which he was held by his medical associates. While a resident at Anderson, Dr. Hodges served one term as President of the local society, three terms as Secretary and Treasurer of the Mitchell District Medical Society, and was only defeated by a narrow margin for the position of Secretary of the Indiana State Medical Society in 1895. Until his removal to Ashland, Dr. Hodges also occupied a chair in the Fort Wayne College of Medicine, being Professor of Genito-Urinary Surgery and associate to the chair of surgery.

The writer has been intimately associated with Dr. Hodges for a number of years, having been a roommate while attending literary college, and having been associated with him to a more or less extent in professional work since that time. He was an indefatigable student when once interested in a subject and had an unusual faculty of following lines of original investigation, which invariably turned out to be of practical benefit not only to himself but to other members of the medical profession. He was a generous-hearted and exceedingly companionable fellow, with but few of the little narrow despicable traits of character which often-times mar a personality that would otherwise be creditable and worthy of emulation. As has been well said, the medical profession has lost a man of recognized ability and flattering possibilities, while the bereaved family will miss a loving, indulgent and cheerful husband and father.

PROGRESS AMONG OUR ADVERTISERS.—Early in January we addressed a letter to each and every one of our advertisers asking for an expression of opinion as to the status of business during the year 1900. Each was asked what particular advancement or progress had been made in his particular line, and what particular progress might be expected during the coming year. All did not respond to the inquiry, but the general opinion of the combined replies would seem to indicate that the year 1900 was an exceptional one so far as the aggregate amount of business was concerned, though not particularly striking so far as new advancements are concerned.

The well known firm of Park, Davis & Co. write us as follows: "Not in any spirit of egotism, but in all sincerity, we feel

bound to say, that we regard as the most important contribution made to pharmacy during the year 1900 is the further elaboration and perfection of physiological assay methods for the testing and standardization of drugs which are not susceptible of assay by means of chemical test. A number of such drugs are in exactly the same category with diphtheria antitoxin. There is no option—these drugs and their preparations must either be tested on the patient or tested on the living animal. We hold that the systematic assay of each and every parcel of such drugs and their preparations, with the aid of the reaction in the living animal, is alone worthy of twentieth century pharmacy.

“A wide and intensely interesting field of investigation and speculation has been opened up by the discovery of the powerful and useful properties inherent in the suprarenal gland. Conspicuous merit must be conceded to the isolation of its active principle by one of the members of our scientific staff, Dr. Jokichi Takamine.

“During the year 1900 scores of minor improvements have been effected in our various line of pharmaceutical preparations—fluid extracts, solid extracts, pills, tablets, elixirs, etc. We have materially increased our battery of vacuum pans, and these are beyond all price in the improvement which they render possible in preparations like solid or powdered extracts which must be condensed or evaporated down under the very guarded application of gentle heat. The vacuum pan, of course, renders possible the use of a much lower temperature. Its employment in pharmacy, especially in the preparation of Malt Extract, is an old story, but during the past year we have enormously extended its use. Scarcely a day passes without an improvement in the process of manipulating a pill mass or in the menstruum for extracting a fluid extract, or in the method of manufacturing a tablet formula. All these things make for greater medicinal activity, greater uniformity, greater elegance and more assured results in treatment.

“The state of our trade relations has been very satisfactory during the year 1900. The latter has not, however, proved, relatively, so brilliant as its predecessor, 1899. This is to be attributed to the fact that 1899 was a year of extreme reaction from many years of trade depression. We believe, however, that none of the manufacturing houses have any quarrel with 1900. For our own part, we have fared very well in every branch and in all

departments; 1901 bids fair, in our judgment, to prove the most brilliant year in the entire history of American manufacturing pharmacy. The country generally is prosperous; business is excellent, and unless a crop failure should afflict a large section of the United States, we ought to have a good year."

The Bovinine Company, of New York, says: "We make Bovinine as we did in 1877, having proved to our own satisfaction, and also to that of the medical profession, that it is simply a perfect food. There has been no boom in the sale of our products but a regularly increasing business to be noted month by month and year by year, and this is vastly more satisfactory to us than the "sky rocket" style of doing business. We think that all reputable manufacturers of acknowledged useful preparations are satisfied with the business of 1900, as far as the increase is concerned. No one can tell what the year just opened will bring forth, but there seems to be nothing in the political or medical horizon that need in any way dampen our expectations and hope that the year will be a successful one. We will continue to make our product as perfect as it is possible, buying the best materials and compounding them with the greatest care and cleanliness.

The Globe Manufacturing Company, of Battle Creek, Mich., has this to say: "We devote our attention chiefly to the manufacture of our Nebulizing Apparatus and Compressed Air outfits. Formerly our efforts were confined principally to our single Nebulizers, which were operated by hand, but of late there has been a steady increase in the demand for our complete Multi-Nebulizer outfits, due largely, we think, to the very successful and satisfactory results which are secured through the application of vapor massage, which was originally suggested by us, and for the application of which our Globe Multi-Nebulizer was especially designed. The demand for these outfits has never been so large as at present, and the indications are that this demand will steadily increase for some time, owing to the extended recognition of the value of vapor massage.

The Old Chemical Company, of New York, voiced no sentiments regarding the past, present or future conditions of trade, and while adverse to expressing their view for publication, gave the impression that they were satisfied with the increased demand for their product and the prospects for the future.

The Berghoff Brewing Company say that there never was a time when they made a product from better materials, and which, from its freedom from impurities, and improved processes of manufacture, was more in demand than at the present time. The guaranteed purity of the Berghoff beer makes it of interest to physicians who are in the habit of prescribing a malt and hop tonic as a reconstructive agent in debilitated conditions. No new methods in the process of manufacture have been discovered, the aim being to make the quality the best attainable.

Mr. Fellows, manufacturer of the well known Syrup of Hypophosphites compound, says that his product is manufactured by the same process as that which was first used, the aim being to produce a product that is made from the best materials obtainable and one that can be relied upon for uniformity of results. The demand for Fellows' Syrup of Hypophosphites has steadily increased and the prospects for the future are encouraging.

The Rio Chemical Company have nothing to offer except to say that their preparations are prepared at the present time the same as in the past, from the best materials and with skill and accuracy. The demand for their various preparations has been steadily increasing, which is a positive indication of merit.

The M. J. Breitenbach Company, agents for Gude's Pepto-Mangan, advise us that the extensive fire which destroyed their entire New York plant had a tendency to put them back somewhat in their orders, but that they soon established themselves in larger and better equipped quarters, and have been able to catch up with the great increase in their business that has occurred during the past year. Gude's Pepto-Mangan has been recognized by the profession as one of the most valuable reconstructive agents, and the American agents therefore look forward to a marvelous increase in the demand for this product as a result of that fact.

Several other advertisers advise us that they are satisfied with the state of business during the year 1900, and that the prospects for the year 1901 are very promising. None of them lay claim to any unusual changes in methods.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

CAUSATION, PREVENTION AND CURE OF GOUT.—Haig gives a general review of his now well known theory concerning the etiology of gout and rheumatism. He does not accept the bacterial origin of rheumatic fever, and believes in the identity of gout and rheumatism. His theory makes uric acid in solution responsible for the attacks of both diseases. He does not believe that the salicylates are at all times a useful remedy in rheumatic condition, but that frequently they may do harm rather than good. His chief points in treatment are that uric acid being a poison should be introduced into the body in as small quantities as possible, and to this end dietetic measures are important. Again it is urgent to provide for the elimination of poison already in the body. It is especially important to see that a proper quantity of albumen is taken in proportion to the body weight. In some acute and chronic conditions we should aim to diminish the alkalinity of the blood, which is high, for the purpose of favoring the best action of the salicylates. The same principle holds for the acute arthritis of gout. Give the salicylates alone and plenty of them, and on no account with alkali or colchicum, as these increase the alkalinity of the blood. During this treatment he does not cut off wine or cut down meat, for both tend to keep up the acidity of the urine and diminish the alkalinity of the blood. He believes that the high blood pressure of chronic gout is due to large excess of uric acid in the blood and recommends the iodide of sodium more or less aided by the chloride and bromide of ammonium and chloride of sodium.—*Phil. Med. Jour.*

TREATMENT OF THE LATER PHASES OF HEART TROUBLES. — Heffron (*Moston M. & S. Journal*) contributes a paper on the treatment of the later phases of heart diseases. When compensation has failed the first indication is to relieve the heart of all extra work, which is best accomplished by rest in bed. In the second place, the volume of blood to be propelled by the heart should be diminished as much as possible. For this purpose the hydragogue cathartics are the best, and of these the most preferable is elaterium, followed in order of preference by calomel and the salines. In the third place, the distressing nervousness of the patient, which increases the irritability of an already overburdened heart, must be controlled. For this purpose ice bags, locally, codein and morphine may be used. The author believes that heroin is a modern fraud. In cases in which the nervousness is not extreme he has had gratifying results from the use of the extract of *cannabis indica*. The diet must, of course, be controlled. When failure of compensation has resulted in dropsy it is sometimes necessary to withdraw the fluids by mechanical means before drugs will exert their physiologic action. The author believes in the use of the hot air cabinet in order to promote the excretion of sweat, and in *digitalis*, squill or potassium acetate to stimulate the excretion of urine. In order to aid in the complete retrograde metamorphosis of waste matter, the author has found the systematic administration of oxygen to be of very great value. While *spartein*, *cactus*, *convallaria*, *strophanthus*, and *adonis vernalis* are useful, *digitalis* is the drug that can be most often depended upon. In cases of sudden failure of cardiac power, drugs that act quicker than *digitalis*, such as nitro-glycerine, alcohol, ammonia, and strychnine are used. Oertel's method of hill climbing, and the Schott method of treatment by carbonated baths are extolled.—*Phil. Med. Jour.*

WATCH MEDICAL LEGISLATION.—It behooves the members of the medical profession, in the various states in which a legislation is in session, to keep in close touch with what is going on in regard to the regulation of the practice of medicine. In nearly every state more or less vicious medical legislation is being attempted. In Illinois an amendment to the medical practice act is proposed, in which these words occur: "Nothing in this act shall be construed to apply to any person who ministers to or treats the sick or suffering by massage, or by mental or spiritual

means, without the use of any drug or material remedy." The object of this amendment can be readily seen. In those states where there is no committee officially appointed to represent the profession, such legislation as the above will be easily managed and the profession wake up, when it is too late, to realize the fact that laws have been passed that are detrimental alike to the people and to the profession. When this occurs, nine times out of ten it is the fault of the profession itself, a result of lack of organization and of apathy.—*Editor J. A. M. A.*

BRAIN TUMORS AND CYSTS.—Hoppe (*Jour. A. M. A.*, Feb. 2), in an article on brain tumors and cysts, draws the following conclusions:

1. Tumors of the cortex or subcortical region of any portion of the cerebral hemispheres which can be reached through the calvarium are operable.

2. If possible, the operation should be performed early, when the tumor is small; but even large tumors and those infiltrating in character have been operated on with success.

3. A study of the successful cases show that, with few exceptions, brain surgery is limited to the psychomotor areas (Von Bergmann).

4. The result of surgical interference, even in the most successful cases, rarely leads to complete recovery. The general symptoms due to intracranial pressure disappear, but the focal symptoms, viz., the epileptic seizures and paralysis, either remain permanently or are only diminished. It is not to be forgotten, however, that the life of the individual has been saved.

5. Cerebellar tumors are inoperable. This is the law laid down by Oppenheim and concurred in by Bergmann. Those of the posterior and upper surface of the cerebellum, near the lower margin of the occipital lobe have been removed, but the operation has been invariably fatal (Oppenheim). The danger is due to the crowding of large sinuses into a small field of operation and the pressure upon, and displacement of, the medulla. Occasionally a cyst has been luckily tapped, but we can never localize with certainty, and we all know how disastrous exploratory operations are in this region.

6. The cumulative experience of all writers is against the exploratory operation.

7. Shall we advise palliative operations? On this subject authority is divided. Horsley, Bramwell, Annandale, Sanger, Sahli, Sinking, Keen, Bruns, and perhaps Oppenheim are in favor of palliative operations for the relief of violent symptoms of increased intracranial pressure in rare cases. Von Bergmann and Von Braman are against it. My limited experience in cases in which I refused to advise an operation and the operation was, nevertheless, performed, has been with those who oppose the operation.

8. I do not agree with Oppenheim that gummata should not be operated on. I have in my possession the brain of a man who refused to be operated upon, which shows that the gumma could have been removed successfully. This gumma was located accurately and diagnosed as such in the arm center during life. In my opinion, tubercles, if isolated and located so as to be operable, should be operated upon, other things being favorable. Metastatic carcinomata are inoperable.

HYDRIATICS IN THE TREATMENT OF CHLOROSIS.—The following abstract is copied from the *J. A. M. A.*, Feb. 16, being one of a series of papers presented in the symposium on chlorosis before a joint meeting of the Chicago Society of Internal Medicine and Chicago Medical Society, Jan. 15:

Dr. G. W. McCaskey, of Fort Wayne, Ind., read a paper on this subject. He especially disclaimed any intention of advocating hydrotherapy as an exclusive method of treatment, but urged its careful use in selected cases as a most valuable aid. The treatment, he maintained, should be based on a proper conception of the principal pathologic facts, among which were mentioned the oligochromemia, oligocythemia, and oligemia. Especial stress was laid on the oligemia as not being fully recognized in dealing with chlorosis, and as indicating a great impairment of the hematogenic organs. Because of the marked decrease in the total mass of blood which undoubtedly exists, the blood count may be normal with a serious degree of oligemia. The weakness of the heart with more or less dilatation; a general lowering of the blood pressure because of the heart conditions and vasomotor states; the resulting impairment of function of all the principal organs as a necessary result of the preceding conditions; and the retention of subcutaneous and intravisceral fat and hypoazaturia as a result of defective

oxidation and lowered metabolism, and hypoplasia of cardiovascular and genital organs, the common embryonic origin of which from the mesoblast was pointed out as a possibly significant fact, furnish the principal indications for therapeutic procedure.

While the administration of iron was advocated, the exceedingly small amount absorbed, coupled with the better therapeutic results claimed from tremendously large daily doses, points to an indirect action of iron upon the alimentary tract.

The rest treatment in conjunction with iron, the importance of which most recent authorities emphasize, was pointed out as an important factor in permitting recuperation of cardiovascular tone, and in so doing improving the functions of the digestive organs and of the red bone marrow upon which hematogenesis is absolutely dependent. Some recent writers report cases treated by rest alone, without iron, with favorable results. The writer believes that there is a radical fault in the organ concerned in making red blood cells—which in the human subject is the exclusive function of the red bone marrow, and that the treatment must be directed toward improving the functional activity of this important tissue. The quality of chlorotic blood is the same as that produced by overworked blood-making organs; the parallelism with the final stage of post hemorrhagic anemia being especially striking. No single therapeutic measure can so directly influence the nutrition and functional activity of the bone marrow as hyprotherapy. Its anatomical surroundings remove it from all but indirect methods, and after supplying abundance of iron with such a degree of rest as is indicated, forced feeding and special treatment of any organ that may need it, the indirect results of hydriatic measures can favorably modify the bone marrow in accordance with well known physiologic laws. The observations of Schuller on the vessels of the pia mater after thermal stimulation of the skin; of Naumann, who demonstrated the partial reflex character of these phenomena, and of Winternitz, whose plethysmographic tracings demonstrated the increased volume and tension of blood in areas removed from the direct impress of cold and heat, were cited as a physiologic basis of hydriatic treatment, concerning the efficacy of which the writer has satisfied himself by a considerable personal experience, supporting the views of Struempell, Winternitz, Immermann, Baruch, and others.

Various methods are available, such as the full bath, spray, douche, etc., the guiding principles being to use that degree of stimulation from which the patient will show a healthy reaction, and to use cold guardedly, and as a rule preceding its application by a storage of heat, which will permit of the stimulating and tonic influences of cold without resulting depression.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

TUBERCULOSIS FROM MOTHER'S MILK.—Roger and Garner (*Compt. Rend de la Soc. Biolog.*, 175, 1900), report a case of a human mother with pulmonary tuberculosis in whose milk the produced tuberculosis. A child of this patient, who was suckled tubercle bacillus was found. The milk inoculated into guinea pigs only from the third to the sixth day after birth, died in six weeks, and a post-mortem examination showed numerous tubercles in the abdominal organs. The mother's breast appeared perfectly healthy, certainly showing no signs of tubercles.—*Journal Applied Microscopy*, October, 1900.)

IMPORTANCE OF CLEANING FAUCES OF MUCUS IN THE NEW-BORN.—Dr. Austin Fluit, in the course of a paper on the conduct of labor, (*Regular Med. Visitor*, January) says:

“Immediately after the delivery of the head, the mouth and eyes should be wiped out. The advantage of clearing the fauces of mucus before the first effort of inspiration is very great. The child is prevented from drawing mucus into its lungs; and when the mouth is cleared, as a routine practice, partial asphyxiation is very much less frequent. While apparently only a minor point, this is well worthy of more general adoption.”

A NEW SIGN OF EARLY PREGNANCY.—Winter (*Medical Review of Reviews*, December, 1900) was the first to point out an irregularity in shape in the recently gravid uterus, which he thought due to partial contraction. Von Braun Fernwald showed

that there was irregularity in both the shape and consistency of the recently gravid womb. He assumes that the thicker and softer side is that portion of the womb lodging the ovum. Heil, Piskaceck and others have verified the existence of the sign in a large per cent. of cases, but there is a difference of opinion as to its cause. That the sign exists, and may therefore aid in the diagnosis of early pregnancy, is the practical point of importance.

SUPRARENAL EXTRACT FOR ANEURYSM.—In a paper upon the uses of suprarenal extract by Dr. W. H. Bates (*Int. Med. Mag.*, December, 1900), occurs the following:

Aneurysm.—Dr. J. B. Moore is the first to report a case benefited by suprarenal. The patient, a man aged forty-two, syphilitic history, had an aneurysm of the external carotid sufficiently large to cause considerable dyspnea by pressure against the pharynx with pain and dysphagia. Ten minutes after the internal administration of gr. v of suprarenal powder, the pain, dyspnea and dysphagia became decidedly less and the patient was able to swallow some fluid without any discomfort whatever. The aneurysmal tumor was now much less in size. Suprarenal was prescribed with iodid of potassium *t.i.d.*, and a rapid recovery followed.

In conclusion, let me repeat that the suprarenal extract is the most powerful astringent hemostatic and heart stimulant known. The field of its usefulness is rapidly widening. It is a safe remedy and the reason why no bad effects have followed its administration is because we are using as a drug one of the secretions of the body which is necessary to life.

TREATMENT OF THE BREASTS.—Broadhead advises nothing should be done to the breasts during pregnancy besides ordinary precautions for cleanliness, bathing each day with warm water and castile soap, and a little massage where the nipples are small. Alboline applied on sterile gauze over night is also advisable. With nursing women the nipples should be so covered between nursings, and should never be handled. If they become cracked nothing equals the application of a 10 per cent. solution of silver nitrate, two to three applications usually producing a cure. After each nursing the nipples should be bathed with a solution of boric acid and the child's mouth treated in the same way. Where the patient does not nurse a tight breast-binder will be sufficient to dry up the milk; otherwise Rochelle salts should be administered freely and

the amount of liquid limited. In very few cases will massage be necessary. In nursing women with oversecretion a little pressure may be needed, otherwise it should be avoided. In all cases the breasts should be supported to avoid caking, while Rochelle salts is good treatment for oversecretion. Abscess is rare with extreme cleanliness; where it occurs, massage should be used to express the pus through the nipples. Nursing should be stopped. If this fails, the abscess must be treated as abscesses of other parts of the body.—*Interstate Med. Jour.*, November, 1900.—(*Jour. Surgical Technology*, December, 1900.)

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, and the Allen County Orphan Asylum

Professor of Laryngology and Rhinology in the Fort Wayne College

of Medicine, Fort Wayne, Indiana.

SOME OBSERVATIONS IN MASTOID OPERATIONS.—Dr. A. W. Calhoun, at the Atlantic City meeting of the American Medical Association (*Journal of the Asso.*), comments on the fact that mastoid diseases are rather infrequent as compared with the total number of acute and chronic middle ear suppurations. It is a fact, however, that mastoiditis is more frequent in some sections than in others, usually being most frequent in those sections having a harsh climate.

Another observation worthy of comment is that in a great majority of cases the damage to hearing is slight and patients regain much of the hearing lost as the result of the mastoid complication. This is a matter of surprise when one recalls to mind the changes and disturbances which take place from the inflammation and the operative procedure within the mastoid cavity.

The disease occurs about equally often in children and adults. Strange as it may seem, the negro appears to be exempt from this affection, and in the study of the many diseases of the black race it has been found, by those of large experience, that the negro is much less susceptible to middle ear diseases than the white race, and being thus less susceptible, it follows that mastoidal complications should be rare with him.

Some very serious mastoid diseases occur without marked symptoms, such as swelling, pain, etc., and but little abnormal temperature. Recurrent slight acute attacks finally lead to the decision that operative measures are needful, and the operation develops the fact that very serious inflammation existed in the cavity. Occasionally cases present themselves where the mastoid inflammation exists apparently without middle ear involvement. There must have been an acute otitis media, with an extension of the inflammation into the mastoid cells, but no suppuration of the middle ear taking place.

There can be no doubt of the tendency to spontaneous and complete recovery in many cases of the disease of even severe types. A good result is not infrequently reached by only resorting to the Wilde incision. Such recoveries occur often enough to cause one to pause and consider whether the severe and radical Stacke operation for mastoid disease is not frequently made, when delay might have led us to much simpler and just as satisfactory treatment. The essayist very properly lays stress upon the fact that it is not in very seemingly severe cases of mastoid disease that it is necessary to rush to radical operative treatment, for not an inconsiderable number make good recovery under milder treatment.

Prompt and thorough surgical treatment in well marked typical acute and subacute mastoiditis should not be condemned when used with the judgment of an experienced observer. One of the chief advantages of the surgical treatment is the rapid and complete cessation of the middle ear inflammation, discharges, etc., in a large majority of cases. In the experience of the author such radical measures as the Stacke operation are seldom required, the disease yielding readily and satisfactorily to the less severe operative procedures.

It might be well to remark that the comparative infrequency with which the middle ear disease is encountered in the negro race is perhaps due to the fact that the negro is also particularly exempt from catarrhal inflammations of the upper respiratory tract. Several of our southern confreres have reported that in a large experience in the treatment of the affections of the negro race they have not run across cases in which adenoids of the naso-pharynx, or even post-nasal catarrh, was present to any appreciable extent. As nearly all of our cases of middle ear trouble are due to an extension of inflammation from the naso-pharynx, the fact that the

negro race is comparatively free from post-nasal inflammations would seem to afford a reason for the freedom from middle ear disease.—Ed.)

STRABISMUS AND ITS MANAGEMENT.—Dr. J. H. Woodward, in the *Medical Record* of February 16th, gives some good and wholesome advice regarding the management of non-paralytic strabismus. He says that in the first place there should be a proper correction of the errors of refraction of both eyes, while the accommodation is completely paralyzed by atropine.

He complains bitterly of the habit which many physicians have of sending patients to opticians to have their glasses fitted, considering it incomprehensible that an intelligent and conscientious physician should give such advice to one of his patients. What criticism would be heaped upon ophthalmologists if, in a perfectly comparable and precisely as reasonable a way, they were to advise patients to consult a druggist for their various ailments. The welfare of thousands of patients depends more upon the adjustment of correct lenses to their eyes by a trained ophthalmologist, who understands pathology as well as optics, than upon all the medicines in all the drug shops in the city.

In a comparatively small number of cases the constant use of proper lenses will subdue moderate inequalities of the ocular muscles that are not paralytic in nature. In a certain percentage of cases relief may be obtained by the addition of muscular exercises with the stereoscope, or some other equally good method. In the majority of cases one or more operations will be required to complete the cure.

When strabismus is alternating and marked, both eyes must as a rule be operated upon. When the strabismus is unilateral, operation upon the deviating eyes alone will usually prove sufficient.

Division of an ocular muscle is indeed a small matter which any surgeon may accomplish without much effort, but that is not what we mean nowadays by the treatment of strabismus. The doctrine that, given convergent squint, for example, we must divide one internal rectus, and if that does not cure we must then divide the other, has resulted in so many examples of divergence that the tradition of those days of heroic ignorance still carries distrust to the minds of many patients and physicians. The truth

is, each case is a problem by itself, to be studied with care and solved with cautious deliberation and sound judgment. In general terms we have to deal, on the one hand, with an overacting and often contracted muscle, and on the other with an overstretched and enfeebled muscle. The principle that ought to control operative interference is that we should weaken the one by judicious tenotomy, and strengthen the other by advancement of its insertion. Upward deviations, so often overlooked in convergent strabismus, must be corrected by "graduated" tenotomies, in order that the object sought may be attained.

The ideal result consists not only in reduction of the apparent squint, but in the establishment of normal binocular excursions of the eyeballs, and in restoration of binocular vision. It is readily comprehensible that such an ideal may not be attained by a *coup de theatre*. That it may be attained by painstaking endeavor is one of the many achievements of modern ophthalmology.

Treatment of strabismus should be inaugurated as soon as the child is old enough to wear glasses. Even operative interference need not be postponed, as some advise, until the sixth or seventh year; for it is frequently advantageous to begin such work at an earlier age. On the other hand, the fact that strabismus has persisted twenty or more years does not contraindicate an operation for its correction.

In conclusion, it may be said that strabismus is vastly more difficult to deal with satisfactorily than are most cases of cataract, notwithstanding that the truth of the proposition depends upon one's conception of what constitutes a good result. Operations for strabismus should not be undertaken by one who is not familiar with the anatomy, physiology and pathology of the visual apparatus; and only those operators whose technique is characterized by scrupulous surgical cleanliness should be permitted to engage in such work.

BOOK REVIEWS.

THE ANATOMY OF THE BRAIN.—A text book for Medical Students. By Richard H. Whitehead, M. D., Professor of Anatomy in the University of North Carolina. Illustrated with 41 engravings. Philadelphia, New York, Chicago. The F. A. Davis Company, Publishers. 1900.

This excellent little brochure presents within a compass of less than one hundred pages an excellent and well illustrated description of the anatomy of the brain. The author recognizes the importance of the embryological development of the brain as the starting point, so ably and successfully illustrated by Edinger; and leads the student by judiciously selected illustrations through the somewhat complicated mazes of human cerebral anatomy. As an introduction to the subject and as a stepping stone to the more comprehensive volumes of Edinger, Obensteiner and others, the book can be warmly commended to the medical student as well as to the practical physician who desires to either refresh his memory or more probably supply the gross defects in the curriculum of his alma mater.

G. W. M.

SEXUAL DEBILITY IN MAN.—By Frederick R. Sturgis, M. D., formerly Clinical Professor of Venereal Diseases, Medical Department, University of the City of New York; ex-Visiting Surgeon to the City Hospital, Blackwell's Island; Author of "A Manual of Venereal Diseases;" one of the Authors of "A System of Legal Medicine," etc., etc. E. B. Treat & Co., New York City. Price \$3.00.

The author's excuse for writing the book is that he wanted to place before the profession his own ideas on the subject.

Commencing with the anatomy and physiology of the sexual organs of the male, the author takes up, in order, each of the sexual diseases and treats them in a comprehensive and methodic manner. The book contains 432 pages, including the plates, reference list and index. The plates (nine in number) are placed to-

gether at the back of the volume. The book is evidently written by one who has something to say and knows how to say it in good forceful English.

We have but one criticism to offer. There can be no excuse for the tendency to vulgarity and sensuality which crops out in a few places in the book. In every other way the book is to be commended. P.

PRACTICAL URANALYSIS AND URINARY DIAGNOSIS.—A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, LL. D., M. D., Queens University, Fellow of the Royal College of Physicians and Surgeons, Kingston, Canada; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys;" also of "Diabetes: Its Causes, Symptoms, and Treatment." Fifth Revised and Enlarged Edition. With numerous Illustrations, including Photo-engravings, Colored Plates, and Tables for estimating total solids from Specific Gravity, Chlorides, Phosphates, Sulphates, Albumin, Reaction of Proteids, Sugar, etc., etc., in Urine. 6x9 inches. Pages xvi—406. Extra Cloth, \$3.00, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

The author has taken advantage of the demand for a new edition of this standard work to make a thorough and complete revision, bringing the book down to the present standards in this line of work. Previous editions have been reviewed in these pages and all the words of commendation which have heretofore been said can be applied with greater force to this volume. Especial stress is laid upon the importance of centrifical analysis which the author has no hesitation in asserting can now be made with a degree of accuracy equal to that of any other method. If this is true, and we have good reasons for accepting any such statement made by the author, it is one of the most important advances in clinical medicine of recent date.

As these pages go to press the sad tidings of the death of the gifted author, who has been an ornament to his profession, are just received. This edition therefore represents the final and complete exposition of his life work, and as such will be more highly prized and gratefully welcomed by an appreciative profession.

G. W. M.

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., assisted by H. R. M. Landis, M. D. Volume IV. December, 1900. Diseases of Digestive Tract and allied organs, the Liver, Pancreas, and Peritoneum—Genito-Urinary Diseases and Syphilis—Fractures, Dislocations, Amputations, Surgery of the Extremities—and Orthopedics—Diseases of the Kidneys—Physiology, Hygiene—Practical Therapeutic Referendum. Lea Brothers & Co., Philadelphia and New York. 1900.

The succeeding volumes of *Progressive Medicine* have come to be welcome and well known visitors to our library tables. This volume is fully up to the standard of those which the writer has been reviewing in these pages since the issue of the first number. It contains several noteworthy reviews of medical progress, the first one being that by Dr. Max Einhorn on the diseases of the digestive tract, allied organs, liver, pancreas and peritoneum. Much of interest is contained in this review, the notice of displacement of the liver being particularly interesting, being a subject that has not received the attention to which its clinical importance entitles it. The section on genito-urinary diseases by Dr. William T. Bellfield brings this important subject up to date; among the most interesting points noted being the surgical treatment of unilateral infectious nephritis, quoting among other results Pousson's experience with twelve operative cases, with a recovery of about 85 per cent. Surgery and orthopedics, by Dr. Bloodgood, contains many things of interest, among which may be mentioned the discussion of lumbar puncture, which is attracting so much attention at the present time. The question of spinal anaesthesia by cocaine injections does not receive the attention which its present importance would seem to require. The number of fatal cases, and serious results other than fatal, have been so numerous lately that it would seem as though a note of warning ought always to be sounded. Chapters on diseases of the kidney, physiology and practical therapeutics make up the remainder of a volume replete with interest. G. W. M.

A TREATISE ON DISEASES OF THE NOSE AND THROAT.—By Ernest L. Shurly, M. D., Vice President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and late Chief of Staff, Harper Hospital; Con-

sulting Laryngologist and Chief of Laryngological Clinic of St. Mary's Hospital; Consulting Laryngologist to the Woman's Hospital and Foundling's Home; Member of the American Laryngological Association; of the American Climatological Association; of the American Medical Association; of the Michigan State Medical Society, etc. Illustrated. New York. D. Appleton & Company. 1900.

Like many another book from the hands of a recognized authority, this volume, as announced by the author, has been prepared for the perusal of the general practitioner and medical student, rather than the specialist in laryngology. It would perhaps be unfair to say that the work will not prove as interesting and valuable to the specialist as to the general practitioner or student, for the former is particularly interesting in the discussion of various subjects from the standpoint of practical experience and observation, rather than from theoretical ground, and Dr. Shurly has above everything else given us a book that abounds in facts relative to diseases of the nose and throat as brought out by practical experience or observation. Nothing has been omitted that belongs to an up-to-date work upon rhinology and laryngology, and while the matter is concise, it is yet sufficiently comprehensive to enable any student of medicine to obtain a clear and practical knowledge of the subject.

A criticism which we would offer is that in the discussion of the therapy of diseases described the reader may be confused by the number and variety of treatments that receive favorable mention. We also doubt the propriety of suggesting a large number of remedies to be used in the treatment of any certain affection, without specifically stating how much and in what manner the remedies are to be used. Such a variety of effects are produced by drugs used in different strengths and combinations that it will not do to refer to single formulas in the back portion of the book. This criticism, however, is of minor importance when we consider the general usefulness of the book.

We desire to call attention to the large number of beautiful illustrations, some of which are in colors, which render the text more intelligible, and compliment the author upon several very fine plates taken from frozen sections and enlarged views of various pathological conditions. The book will certainly take its place among the standard works upon laryngology and rhinology and is worthy of such a position.

A. E. B.

MODERN MEDICINE.—By Julius L. Salinger, M. D., Demonstrator of Clinical Medicine, Jefferson Medical College; Chief of the Medical Clinic, Jefferson Medical College Hospital; Attending Physician to the Philadelphia Hospital, and Frederick J. Kaltyer, M. D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College; Hematologist to the Jefferson Medical College Hospital; Pathologist to the Lying-in Charity Hospital, Philadelphia; Assistant Pathologist to the Philadelphia Hospital. Illustrated. Philadelphia and London. W. B. Saunders & Company. 1900. Cloth \$4.00 net. Sheep or $\frac{1}{2}$ M., \$5.00.

The title of this volume is something of an innovation in works upon scientific medicine and implies an "up-to-dateness" as a special characteristic of the volume. The size and scope of the work and the necessarily limited space which can be accorded to each subject precludes the possibility of anything like a comprehensive view of the entire field of practical medicine. It touches very nearly everything within this field, the only important omissions which occur to the writer being mental disorders and skin diseases. Such subjects as clinical bacteriology, laboratory methods, physical diagnosis, animal parasites, intoxications and diseases of the muscles receive such attention as the plan and scope of the work permit.

The work is something more than a compend and something less than a comprehensive treatise and gives to the reader a succinct birds-eye-view of very nearly the entire field of practical medicine from a fin-de-siecle point of view. Viewed in this light the work of the authors is entitled to meritorious recognition, inasmuch as it is by far the best presentation of this sort with which the reviewer is acquainted. The student will not look in vain for at least some brief reference to every recent diagnostic and therapeutic hint of value which has recently enriched current medical literature, but has not yet been incorporated in many of the standard treatises upon practical medicine.

The illustrations form one of the most commendable features of the work. They are quite numerous and of a very high order of excellence, no pains having evidently been spared to render them both realistic and artistic. The colored plates are especially deserving of commendation, and the mechanical execution of the volume leaves little to be desired.

The volume will find a hearty welcome and constitute a valuable addition to the working library of every student and practical clinician.

G. W. M.

FORT WAYNE MEDICAL JOURNAL-MAGAZINE.

VOL. XXI.

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No 3.

ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted
in this department.

"THE ROLE OF THE KIDNEY IN THE PRODUCTION OF THE TOXAEMIAS OF PREGNANCY."

By B. VAN SWERINGEN.

Fort Wayne, Ind.

If there is any way by which one can be apprised of the approach of spasms in a pregnant female, I feel sure that we should all like to know it. If there is any one test that will demonstrate the danger to us, we all want to employ it. Or, if there are a number of tests, the use of which is necessary to be in possession of positive knowledge upon a given case, I, for one, want to know what they are and just how much reliance can be placed in each one alone and collectively. Or again, if we are placing reliance upon one or more tests as indicating safety when there is no safety, and they are therefore not true reflexes or indicators, we want to know that also.

Our information concerning this subject has been very greatly extended during the last few years, but we have still much to learn concerning the causation of the disease.

It is not my intention to enter into a lengthy discussion of all the theories and experiments that have been promulgated and

made, to demonstrate the influence of one substance or another in the production of the condition, but merely to report some observations in connection with a case.

All of the older writers and many of the later ones attribute these spasms to the effect of urea upon the nervous system (brain and upper cord). But when it was demonstrated that urea could be injected into the system of a healthy subject in a much greater amount than could have been present in eclamptics, search was made for other substances which could offer an adequate explanation.

Eclampsia is produced in animals by ligation of both ureters at the end of two days, whereas it takes all the urea that can be formed by the same animal in sixteen days to produce convulsions when injected into it with normal kidneys. These facts seem to do away with urea as a probable etiological factor.

Frerichs advanced the theory that the disease was due to the presence of carbonate of ammonia in the blood and tissues, produced by decomposition of the urea. It has been shown, however, by Feltz and Ritter, that a large amount of urea may be injected into the organism and the whole of it recovered from the urine in the next twenty-four hours. This demonstrates that urea does not alter in its passage through the body, and therefore does away with Frerichs' idea of ammonia poisoning by decomposition of the urea.

Jaccoud blamed various extractive matters, principal among which was creatin. But creatin is found by experimentation to be less toxic than is urea. Uric acid, hippuric acid, leucin, tyrosin, xanthin, hypoxanthin, guanin, the coloring matters, bilirubin and biliverdin, have all been found wanting as adequate explanations of the condition known as eclampsia, because of their respective degrees of toxicity. (*Banchard*, p. 118.)

Traube's theory of cerebral oedema or ventricular dropsy causing anaemia of the brain by pressure is negatived by the post-mortem findings in many cases. Also by the fact that ligation of the ureters, or double calculous obstruction, produces uraemic accidents without cerebral oedema.

Potass and its salts accumulating in the system, the result of defective elimination, has been held responsible, and convulsions may be produced by poisoning with this substance, but it cannot account for all the symptoms of the disease. Bouchard's conclu-

sion in regard to the role of mineral matters in this condition is as follows: "The whole of the mineral substances reckon, at the most, as 57 per cent. of the urinary toxicity, and that potass explains, at the most, 47 per cent. of this toxicity."

Bence-Jones' oxalic-acid theory and Thadicum's urochrome theory are also inadequate explanations of all the phases of the condition.

Bacteria have been held responsible for the symptoms by Gerdes, and Tarnier and Chambrelent found the degree of intoxication could be estimated by observing the toxicity of the blood serum of these patients.

Hermann and Davis, again, while not attributing to urea the sole responsibility for eclampsia, contend that the amount present in the urine is a valuable index in estimating the excretory activity of the patient. Almost all text books make practically the same contention and say that diminution in the amount of the secretion with lessened excretion of urea should be considered as indicating the probability of uraemic accidents occurring.

The case I now present will show, I think, that eclampsia may occur without diminution either in the amount of urine or urea.

Mrs. C. M., 23 years of age, primigravida, expected to be confined December 23, 1900. She had been well during her pregnancy save for an occasional attack of vomiting and some oedema about the face and hands. Her bowels were regular and her digestion and appetite good. She had had no headaches, vertigo or visual disturbances. The examination of the urine on November 1, 1900, showed the presence of a trace of albumen. The previous examinations had been negative in this regard. The twenty-four hours' quantity was 45 ounces and the urea 1.7 per cent. Hyaline casts were also present.

Several examinations, with practically the same result, were made between that date and November 28, when it was found the albumen had markedly increased. The urea, however, was 1.8 per cent., and the amount passed in twenty-four hours 48 ounces, which would give her 424.72 grains of urea in the day. This, it will be remembered, is rather above the average quantity of Davis' cases. Hyaline and pale granular casts were numerous, and while grave fears were entertained as to the outcome, the absence of any headache, vomiting or eyesigns, and the fact that the quantity of urine and urea were not diminished, led me to apprehend no

immediate accidents, especially as I immediately restricted her diet and ordered packs.

The 29th (Thanksgiving day) was passed without accident, and the patient indeed felt unusually well; indulged herself heartily at the table and walked out in the afternoon. Urine not measured, but not measurably decreased. At 2 p. m. of the 30th, she was awakened by a violent headache and vomited several times. She arose and prepared breakfast, and while at the table noticed she could not see plainly. The headache persisted and the first spasm occurred at 10:30. The packs proved useless, as she could not be made to perspire in them, and the first convulsion occurred while she was in one. Morphine grs. $\frac{1}{8}$ was injected hypodermically, and while preparing to move her to the hospital another spasm occurred, which was followed by an injection of morph. sulph grs. $\frac{1}{8}$.

Arriving at the hospital at noon, manual dilatation of the cervix was immediately begun, inasmuch as she was within three weeks of term and it was not thought wise to jeopardize her kidneys any further by allowing the foetus to remain. The third spasm occurred at 1 p. m. The membranes were then ruptured. She was bled 11 ounces from the arm, while 4 pints of normal saline was allowed to run into the veins. The chloroform was then stopped and the labor allowed to take its own course until 3 p. m., when another violent spasm occurred. The pains not appearing to accomplish much, manual dilatation was again resumed and 15 m. of the tincture of veratrum viridi was injected hypodermically. This was soon followed by a reduction in the pulse rate from 100 to 60, but a continuous effort at vomiting also was produced, which required one-half grain of morphine to control. Following each spasm blood would be ejected from the stomach. As soon as dilatation of the cervix permitted forceps were applied to the head, which was in the L. O. A. position, and the child slowly delivered. There resulted, of course, some injury to the cervix, but no marked tears, while the perineum escaped with the exception of a slight abrasion. The child was born asphyxiated and could not be resuscitated, no pulsations being felt in the cord at any time. She had no convulsions after the uterus was emptied, and after being drowsy for twenty-four hours appeared her natural self.

The urine, while in bed and on a milk diet exclusively, has varied from 33 to 54 ounces, the percentage of urea has invariably

been good, and the amount of albumen and casts has steadily diminished.

The point I wish to emphasize by this recital is that these toxaemias of pregnancy occur in spite of the normal amount of urea and urine being eliminated, and that the ordinary examination of the urine, except for the presence of albumen, which indicates of itself nothing immediate or serious, does not disclose in all cases the existence or approach of a very serious malady which may terminate life.

SOCIETY PROCEEDINGS.

NORTHERN TRI-STATE MEDICAL ASSOCIATION.

The mid-winter meeting of the Northern Tri-State Medical Association was held in the parlors of the Wayne Club at Fort Wayne, on Tuesday, February 19th. The meeting was called to order at 1 p. m. by the President, J. A. Weitz, of Montpelier, O., with nearly one hundred members and visitors present. Among the papers were the following:

"A Study of Heredity in Disease," by Dr. W. H. Myers, of Fort Wayne; "Surgical Technique," by Dr. C. B. Stemen, of Fort Wayne; "Surgery of the Pericardium," by Dr. Hal C. Wyman, of Detroit, Mich.; "The Spectroscope in Medicine, with Demonstrations," by Dr. G. W. McCaskey, of Fort Wayne; "The Role of the Kidney in the Production of the Toxoemias of Pregnancy," by Dr. B. Van Sweringen, of Fort Wayne; "Treatment of Corneal Ulcer," by Dr. S. H. Havice, of Fort Wayne; "Report of the Removal of a Kidney," by Dr. N. L. Deming, of Fort Wayne. The papers on the whole were excellent and brought out much interesting discussion.

Owing to numerous postponements in the date of the meeting, the attendance from outside of the city of Fort Wayne was not as good as it should have been, and the evening session might have been taken for a regular meeting of the Allen County Medical Society.

A subject which created considerable enthusiastic discussion was that pertaining to the medical bill before the legislature. A

committee was appointed by the chair to draft resolutions to be wired to the chairman of the Committee on Medical Legislation of the Indiana State Medical Society, at Indianapolis, endorsing the work of the committee and expressing commendation of the amendments to the present medical law as prepared by the committee. It was also the general sense of the meeting that the members should secure signatures to petitions to legislators, asking for a favorable vote upon the medical bill.

It was decided to hold the annual meeting of the society at Angola some time in July.

THE ALLEN COUNTY MEDICAL SOCIETY.

Regular meetings of the Allen County Medical Society were held on February 12th and February 26th, the following papers being presented:

"Senile Gangrene," by Dr. C. S. Williams; "Trachoma and Its Treatment," by Dr. S. H. Havice; "The Gonorrhoeal Puerperium," by Dr. Luella McKinley; "Pathology of the Spleen," by Dr. J. B. McEvoy.

For the meeting of March 12th it is announced that Dr. C. H. English will report a case of "Dermoid Cyst of the Testicles," and Dr. G. M. Leslie will read a paper upon "Castration for Enlarged Prostate."

The open meeting for March 26th has been postponed a week, owing to the graduating exercises of the Fort Wayne College of Medicine. The essayist for the evening will be Dr. Charles Aaron, of Detroit, who will read a paper upon "Diagnostic Value of Examinations of the Feces."

The regular meetings of the society have been unusually well attended throughout the winter, and the papers on the whole were of unusual excellence, several of which have been considered worthy of reproduction at the meeting of the Indiana State Medical Society, to which they have been referred.

Fort Wayne Medical Journal-Magazine

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A Journal of Medicine and Surgery, Published between the 1st and 15th of every month. Price, \$1.00 Per Year, Postage Prepaid.

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EDITORIALS.

THE PROPER KIND OF PETITION FOR MEDICAL LEGISLATION.

It is a well known fact that medical men when advocating the passage of laws to regulate the practice of medicine and surgery, are accused of interesting themselves through a desire for personal gain only, and this opinion is always used as an argument against the passage of any medical bill by those who are opposed to such legislation. Realizing this condition, the Allen County Medical Society recently decided upon a new method, and prepared petitions to the members of the legislature from Allen county, to be signed by the *citizens* of said county only. Each member of the Society was given a blank petition to be circulated among his patients and friends, the signature of no medical man to appear on the petition. Within two days these petitions had 2,000 names

upon them, which, when forwarded to the legislators, certainly indicated the opinions of the people upon the question of medical legislation. If the same procedure was adopted by medical men all over the United States, it is safe to say that fully two-thirds of the voting population of the country could be enlisted in the support of better medical legislation, and our law-makers would be forced to pay attention to the voice of the people, or run the risk of being charged with not keeping faith with the people, and hence undeserving of further political preferment.

DR. GOULD'S JOURNAL.

We have been recently advised that the first number of *American Medicine*, the new medical weekly to be edited by Dr. Gould, will appear on April 6th. It will be remembered that Dr. Gould was deposed from the editorship of the *Philadelphia Medical Journal* without a moment's warning, and for causes, it is said, not in keeping with a desire to render justice to one who has done more to maintain a high ethical plane for medical journalism than any other one man in America.

In response to the demands of representative physicians and friends from various portions of the United States, Dr. Gould immediately put forward a plan for the establishment of a medical journal that should be founded, owned and controlled by the medical profession of America, and published without regard to the commercial interests of publishing houses or manufacturing chemists. That Dr. Gould's plan met with favor is evidenced by the fact that already the founders' shares have all been taken, and the prepaid subscription list to the new journal numbers over 3,000 names. It is therefore evident that *American Medicine* is destined to become not only a great independent organ, which will be thoroughly representative, but one that will be carefully, conscientiously, and ably edited by Dr. Gould, and the reading columns of which will not be dominated or influenced in the least by commercial considerations.

A. E. B.

INDIANA STATE MEDICAL SOCIETY.

As previously announced in the JOURNAL-MAGAZINE, it has been decided to have a three days' session of the State Medical

Society, which meets at South Bend on Wednesday, Thursday and Friday, May 15, 16 and 17, 1901. Dr. J. B. Berteling, the very efficient chairman of the Committee on Arrangements, has been actively at work during the past few weeks making arrangements for the coming meeting, and we are informed by some of our South Bend friends that the local Society will be very much disappointed if there are not over 500 names on the registration book at the close of the meeting, which, of course, will mean that the attendance will be larger than at any other meeting in the history of the Society.

The preliminary program will be mailed early in April, and along with this program will go a special invitation to the wives of the physicians to attend the South Bend meeting and partake of the hospitality of the wives of the physicians of South Bend.

South Bend is prepared to entertain the visitors as well if not better than any other city in the state. That city has not only one of the finest hotels in the country, and a beautiful opera house, which will be used for the sessions of the Society, but one of the most progressive medical societies in Indiana, the members of which have never been outdone for hospitality.

It certainly can be announced that the members of the Indiana State Medical Society can look forward to the South Bend meeting with a great deal of expectancy, for they are promised entertainment that is full to overflowing with social and scientific interest.

A. E. B.

THE NEW MEDICAL LAW.

After a hard struggle the Wood medical bill has passed both houses of the Indiana State Legislature and become a law. The final struggle was an interesting one, and the Christian Scientists, who will be most effected by the bill, did not give up without an heroic struggle, which brought to light the desperate means to which some of the peoples' representatives will resort in accomplishing a result that means pecuniary advantage to themselves. Perhaps the most obstinate, vicious and bitter opposition to the bill came from one of the representatives from Allen county, who, it is reported, spared neither truth nor honesty in his opposition to a bill that would deprive him of pecuniary gain through the practice of the Christian Science mode of healing by his wife.

All is well that ends well, and we are very glad that there are enough legislators in the General Assembly of the state of Indiana to appreciate the dangers that threaten helpless and defenseless children, and some adults, in allowing such criminal practices as those of Christian Scientists to exist under the sanction of law in the state of Indiana. If the Christian Scientists could practice on themselves and upon otherwise intelligent adults who are deluded through the false teachings of the Christian Scientists, we would be perfectly willing to allow them to practice their arts without molestation, believing that there would be no more effective way of getting rid of this dangerous sect; but the fact that the innocent and defenseless are subjected to the criminal neglect as practiced by the Christian Scientists, calls forth a demand for suppression of the whole iniquitous business.

If the new medical law is properly enforced it will be impossible for Christian Scientists to practice their peculiar belief, or for anyone who is not properly qualified by a thorough medical education to practice medicine within the boundaries of the state. One of the provisions of the law is that prosecuting attorneys, on demand of the State Medical Board, must prosecute violaters of the medical law, and it remains to be seen whether the Board will perform its whole duty by insisting upon prosecution in all cases of violation of the law.

A. E. B.

FORT WAYNE HEALTH OFFICER UNDER THE NEW CHARTER.

Under the terms of the new charter recently passed by the Indiana State Legislature, the Board of Health for Fort Wayne, as previously constituted, will be abandoned, and a single health officer, under appointment from the mayor, will have supreme authority in connection with all matters pertaining to public health and sanitation. The salary is 1,800 a year, but if the provisions of the charter are strictly followed, the health officer will have to devote his entire time and attention to the requirements of the office.

We doubt whether a competent man can be secured who will give his entire time and attention to the requirements of the office for a salary of but \$1,800 a year. We believe that the provisions of the charter will be so construed that the city health officer may,

in connection with his city duties, give attention to such work as pertains to pathological and bacteriological examinations, and in this way prove not only serviceable to the physicians of the city, but make it possible for an increase in the salary derived from the city, by fees paid through physicians and their patients for scientific work in connection with bacteriology and pathology.

Dr. Drayer, the very competent and efficient city bacteriologist under the old charter, should under all circumstances be retained if he can be induced to accept the office. We believe that Dr. Drayer, in consideration of his interest in the class of work involved in maintaining such a laboratory as that which he has previously been connected with, will feel warranted in accepting the office under the new charter if allowed to devote his spare time to duties pertaining to pathological or bacteriological examinations required of him by physicians and their patients, with the full knowledge that he is to be paid the customary fees for such services. We believe that we voice the sentiments of the medical fraternity of the city in saying that the health department of Fort Wayne has never received such intelligent and exacting attention as that given it by Dr. Drayer during the past few years, and as the physicians and people have recognized the necessity of keeping this office above the demands of party advantage, there is an earnest desire on the part of all those who appreciate faithful and competent performance of the duties of health officer for the city of Fort Wayne that Dr. Drayer be appointed to the position.

THE QUEEN'S INTEREST IN MEDICAL SCIENCE.

Since the death of Queen Victoria much information has been published relative to her personal characteristics and the opinions that she held regarding questions of interest in the world of art and science.

From the *British Medical Journal* we learn that the queen, from the time of her accession to the throne, always appointed as her medical advisors men who attained eminence in medical science. Thus Sir James Clark was physician and ordinary to the queen from the time of her accession to the throne until 1860, and in 1862 Sir William Jenner succeeded to this position. At the time of her death and for a few years prior to that time she had as medical advisers such men as Sir Edward Sieveking, Sir Alfred

Garrod, Sir Samuel Wilks, Sir William Broadbent, Sir Thomas Barlow, Lord Lister and others of almost equal prominence.

That the queen was interested in the great advances that were made in scientific methods during the sixty years of her reign is evidenced by the fact that she was always willing to lend encouragement and sanction to every new discovery that was pronounced by her medical advisors as worthy of acceptance as a distinct advance in medical science. She was the first British monarch to submit to vaccination, and at a time when the theory that immunitation from smallpox could be secured by vaccination was derided by many of the leaders of the medical profession. She was also the first monarch to submit to anaesthesia as a relief from the pain of childbirth. She was also ever ready to recognize the value of the services of those physicians who made discoveries that marked advances in medical science, and rewarded them accordingly. In threatened epidemics of cholera, or other dangerous or infective or contagious diseases, the queen was among the first to insist upon such precautionary measures as are advocated by all progressive physicians in recognized quarantine regulations.

It may be said that the medical profession and medical science has never had a monarch who was so thoroughly in sympathy with the scientific advancements than has been Queen Victoria. Her example has been the means of influencing for good the English people, and her stand on the side of rational and scientific medicine might be emulated with profit by the rulers of the world and to the benefit of humanity at large.

A. E. B.

BICYCLES FOR THE MEDICAL PROFESSION.

This is the season of the year when bicycle manufacturers approach medical editors with advertising propositions which are on the most part cash and part trade basis. On the face of it, it would seem that bicycle manufacturers are making most flattering terms in offering to give a so-called \$50 wheel for \$15 in cash and \$35 worth of advertising. The truth of it is not a single proposition of this kind comes from manufacturers of strictly first class wheels, and the editor who accepts any of the part cash and part trade propositions is bound to get the worst of the bargain. We are in a position to know that but extremely few wheels that are on the market to-day cost the manufacturer, ready for de-

livery, to exceed \$18, and most of the wheels that are offered in connection with advertising propositions cost less than \$15, ready for delivery. It will therefore be readily seen that if the manufacturers get from \$15 to \$20 cash, as he invariably demands, he gets the actual cost of the wheel and has the advertising, such as it may be, without a cent of expense. The editor, on the other hand, pays from \$15 to \$20 for a wheel that is usually of inferior quality, and which perhaps was never intended to retail for more than \$25, and gives the manufacturer in return \$35 to \$40 worth of advertising, that certainly costs him one-third to one-half as much. The fact remains then that the editor has paid an enormous price for an article of inferior value, and the manufacturer has profited on all sides by the transaction.

Our advice to our medical friends, whether editors or not, is to purchase their wheels in the open market, selecting such as have established merit, paying the regular price therefore and accepting no part cash and part trade proposition from anyone.

The exchange basis, in nine cases out of ten, is expensive for either one side or the other, or perhaps both, and the sooner physicians come to a realization of that fact the better off they will be. The butcher, the baker, or the candlestick maker, who asks that a "doctor bill be traded out" will, unless he has a remarkable conscience, get more out of you than he would if cash were paid for the same amount of goods as are delivered to offset the book account.

Every tradesman recognizes the advantage of doing business on a cash basis, and while every physician cannot expect to have his services paid for immediately in cash, he can at least refuse to trade out bills on the ground that he prefers to pay cash for what he gets and prefers to do the same when dealing with him.

THE USE OF THE STOMACH TUBE.

Some little diversity of opinion appears to exist with reference to the scope of usefulness of the stomach tube in the treatment of gastric disease. It is not conceivable that anyone with much experience would undertake to diagnosticate and treat gastric disease without its use; but there is room for differences of opinion as to the extent to which it should be used therapeutically. The history of the stomach tube has been an interesting one. Early in its use

it was regarded as a panacea for all sorts of stomach disorders and its use was characterized by the sheerest routinism and a total lack of the discrimination and care to which such a measure is clearly entitled. Stomach tubes were placed in the hands of patients and gastric lavage became the fad of the day, and for reasons which must be perfectly apparent to everyone understanding the first principles of gastric pathology a great deal of harm was done by interfering with nutrition and producing various grades of atony. Then came the reaction against its use and its very general condemnation. Later, within comparatively recent years, came its renaissance upon a national basis as an invaluable and indispensable adjunct in the treatment of gastric disease, although in the hands of some men it has undoubtedly still been used in a routine manner apparently with the very contracted therapeutic idea that simply washing out the stomach was all that was necessary, and that it mattered little by whom it is done, so that the viscus was cleaned.

With such narrow views of the nature and relations of gastric disease, it is little wonder that a tendency to be noticed here and there is to decry the use of the stomach tube, although a close analysis will generally reveal the fact that it is not based upon extended personal experience. The mere cleansing of the stomach by simple water or by soap solutions and the use of antiseptics is very beneficial in a certain group of cases in which excessive secretions mixed with food debris cover the gastric mucosa. It is in fact in such cases absolutely indispensable if prompt results are to be desired. But anyone who thinks he is thus meeting all the indications even of a local character in the treatment of stomach disease, to say nothing of the broader therapeutic questions concerned with diet, cardio-vascular tension, associated intestinal disease, neurasthenic states, etc., must indeed be a pinhead clinician.

The fact is that simple lavage should be regarded as merely a temporary expedient, meeting only one of the many indications presented in a certain group of cases and entirely unnecessary in other large groups in which local intragastric treatment is still positively indicated in the best interest of the patient, and in which the use of the stomach tube to a greater or less extent is necessary. Electricity, pneumatic gymnastics, the use of hot and cold vapors, simple or medicated, are among the local mechanical means to be kept in view in the treatment of gastric disease, which will aid in

developing instead of weakening muscular tonicity as excessive lavage undoubtedly does. Among those who have the widest experience in the treatment of stomach diseases the use of the stomach tube will always be extensive, but as a rule where gastric lavage is indicated, it will be given by the clinician himself and will be limited to the absolute needs of the case and supplemented as soon as possible by other means.

M'CASKEY.

NEWS NOTES AND COMMENTS

GRADUATING EXERCISES OF THE FORT WAYNE COLLEGE OF MEDICINE.—The twenty-second annual commencement exercises of the Fort Wayne College of Medicine will be held in the Catholic Library building on Tuesday evening, March 26th. The program consists of addresses by the Rev. D. W. Moffat and Dr. H. Van Sweringen, with remarks by the Dean, Dr. C. J. Stemen, and Hon. Charles McCulloch, President of the Board of Trustees. Following the regular commencement exercises will occur the alumni banquet at the Aveline hotel.

FORMALDEHYDE TREATMENT FOR TUBERCULOSIS.—The injection of formaldehyde solution into the system as a treatment for tuberculosis has of late received considerable attention, and the *Philadelphia Medical Journal*, in a recent number, very properly calls attention to the probability of the production of a cirrhotic process in some portion of the system if this treatment is resorted to. It does not seem out of the range of possibility that continued exposure to such a solution might seriously harden the stroma of the cells of the blood and thus interfere with their oxygen-carrying power.

NEW X-RAY LABORATORY.—The following letter has recently been received:

Dear Doctor:—Permit me to announce that in addition to my laboratory work which I am doing in this city, I have recently

purchased an X-ray outfit, and with the co-operation of Prof. A. B. Crowe, of this city, we are prepared to furnish fluroscopic views and skiagraphic prints. The apparatus is located in the White Bank building, corner Wayne and Clinton streets. Our office hours are from 12 to 3. Any other hours can be arranged by special appointment. The fees will be reasonable, and promptest attention will be given to this class of work. If we can be of service to you, we beg that you call upon us. Yours respectfully,

L. P. DRAYER.

DR. SENN'S VACATION.—D. Nicholas Senn, of Chicago, has recently returned from a mid-winter vacation, necessitated by the arduous duties performed in connection with his professional and literary work.

Leaving Chicago about the middle of December, Dr. Senn went direct to New Orleans, where he boarded a fruit-carrying steamer bound for Costa Rica. True to his usual custom, Dr. Senn took occasion to spend much of his vacation time in investigating the conditions surrounding the hospitals in the capital of Costa Rica, and acquainting himself with the various conditions common in that tropical climate.

EFFECTIVE ADVERTISING.—As an evidence of exceedingly interesting, artistic and effective advertising our attention has been called to the advertising pages of several metropolitan medical journals, in which are seen some beautiful colored plates, presenting reproductions from life, showing the development of the diphtheritic membrane and its disappearance resulting from the administration of antitoxin. The pictures are certainly beautiful works of art, and as an advertisement for a well known pharmaceutical house interested in the manufacture of antitoxin, cannot help but attract attention. The same firm is also publishing colored plates showing the effect of vaccination from the time of inoculation to cicatrization.

DEATH OF PROFESSOR PETTENKOEFER.—The news of the death of the illustrious bacteriologist and hygienist, Professor Von Pettenkofer, will be received by the scientific world with deepest regrets. The *Frankfurter Zeitung* states that Dr. Pettenkofer, who

was a diabetic, had infected himself with a knife with which he opened an abscess on his neck. Like his deceased brother, he was constantly fearing mental derangement, and during a spell of melancholia shot himself during the night in his apartments at the royal residence.

A man of profound learning, indefatigable energy and strength of character, he gained the admiration of all with whom he came in contact. He was instrumental in elevating the subject of hygiene, and he endeared himself to the inhabitants of Munich by his scientific devotion to all matters pertaining to public health. At the age of 83, beloved, respected and pre-eminent, Pettenkofer passed away, leaving an indelible impression for future generations.—*Phil. Med. Jour.*

PREVALENCE OF SMALLPOX. — The prevalence of smallpox throughout various states in the union is more marked than for several years. Nearly all of the central northern states have had several hundred smallpox cases within their boundaries and the western states have suffered severely in many localities. The eastern states, while not effected to the same extent as the other regions, have had here and there epidemics of smallpox that have taxed the resources of the health departments.

So far as we have been able to note, the largest number of cases of smallpox have invariably occurred in regions where vaccination had either been neglected or vigorously opposed. Even in those communities where smallpox has been prevalent, those people who have been exposed and have taken smallpox have invariably been those not vaccinated, while those who have been vaccinated have escaped. This fact alone would seem to be conclusive proof of the value of vaccination and sufficient for any of the skeptical, and enough to made the staunch anti-vaccination crank think twice before publicly or privately denouncing a procedure that prevents suffering, disfigurement and death.

A TEST OF FAITH FOR CHRISTIAN SCIENTISTS. — From the *Philadelphia Medical Journal* we learn that one of the daily papers of the Quaker City wants to have the Christian Scientists inoculated with various diseases, not for the purpose of getting rid of the Christian Scientists, but merely for the purpose of converting these

fanatics and convincing them of the reality of disease. It is suggested that one Christian Scientist take into his system the "germs" of tuberculosis, another the bacillus of asiatic cholera, another the microbe of tetanus, and another still the parasite of malaria. If there is any truth in the discoveries of bacteriology, then every one of these supreme tests would fail, and the luminous truths of Christian Science would shine before the world.

The late Professor Gross adopted the same method of criticism on one occasion when he suggested that a proper test for the non-belief in the existence of hyprophobia would be for the doubter to allow himself to be bitten by a mad dog. The editor of the *Philadelphia Medical Journal* says he is not in accord with these shocking suggestions, even though they are never taken seriously and will never be adopted. He would like to know, however, of what use it would be to convert a Christian Scientist by giving him tetanus or Asiatic cholera. The "healer" would probably not live long enough to prove his experience. But the chief logical defect in the plan, so far as it relates to the Christian Scientist, is that it ignores one of the very elements of ignorance, superstition and delusional insanity. These mental states are essentially illogical, and they do not yield to the ordinary processes of reasoning because the faculty of reasoning is undeveloped or impotent. The more proof there is presented the more obstinacy there is displayed. If it were not for the injuries done to innocent victims, it would be just as well to let this cult go unopposed in the belief that it would some time die a natural death. But these injuries cry aloud for the suppression of the whole mischievous sect.

GOOD ENOUGH FOR HIM.

(By Dr. G. A. Moore.)

For a doctor, old and weary
From his life of toil and love,
Came an angel down from heaven
To transport his soul above.

Said the angel, "I'm from heaven;
The Lord just sent me down
To bring you up to your reward:
To wear your golden crown.

"You have been a friend to ev'ry one,
And workt hard, night and day,
You have doctored many thousands,
And from few received your pay.

"So we want you up in glory,
You have toiled both long and hard;
And the good Lord is preparing
Your eternal, just reward."

Then the angel and the doctor
Started up toward Glory's gate,
But when passing close to hades,
The guiding angel murmured, "Wait!

"I have here a place to show you;
It's the hottest place in hell,
Where the ones who never paid you
In eternal torment dwell."

And, behold, the doctor saw there
His old patients by the score;
And, taking up a chair and fan,
He wisht for nothing more.

But was bound to sit and watch them
As they sizzle, singe and burn,
So his eyes would rest on debtors
Whichsoever way they'd turn.

Said the angel, "Come on, doctor,
There's the pearly gates, I see;"
But the doctor only muttered,
"This is good enough for me."

Am. Jour. Surg. and Gynecol, October, 1900.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

MERCURY IN TERTIARY SYPHILIS.—Dr. A. D. Shaw, of Hot Springs, Arkansas, reports a very aggravated case of tertiary syphilis in an old man, in which mercuriol was successfully used in the treatment. The case was as bad as any that the doctor had ever treated, the patient suffering from indurated sores and other well marked symptoms. During the first two weeks he seemed to grow worse, but after that his improvement was satisfactory to both the patient and physician as well.

THE ELECTROCHEMICAL ACTION OF THE X-RAYS IN TUBERCULOSIS.—J. Rudis-Jicinsky (*N. Y. Med. Jour.*) discusses the electrochemical action of the X-rays in tuberculosis. The application of the X-ray to early cases of tuberculosis is highly recommended by certain authorities. The author has found in certain early cases of the disease, on X-ray examination, a slight haziness, indicating the beginning of tuberculous infiltration in the apices. He has not only attacked the seat of the disease by X-ray treatment, but has placed his patients in pure air, at suitable temperature, and in good hygienic surroundings. The exposure varies in these cases from ten to twenty minutes at each sitting. The rays are to be observed with the fluoroscope at each exposure, the tube tested to see that it is working at its best, and the apparatus must be under full control of the expert, who, with the help of the X-ray, is enabled to determine the limitations of the diseased portion of the lung. His results have been most encouraging, and he urges that this method of treatment should receive more attention in all curable diseases.
—*Phil. Med. Jour.*

A MOVEMENT TREATMENT FOR VERTIGO.—M. Urbantschisch (*Independance Medicale*, February 25), at a recent meeting of the Imperio-Royal Society of Medicine, of Vienna, said that, having noticed that the sensations of vertigo determined, even in the normal state, by rotary movements of the head, were proportionately more tardy of production as the subject was accustomed to execute such movements, he had prescribed frequent rotary movements of the head to many patients subject to vertigo. The patient, lying down, turned the head alternately from side to side, stopping as soon as vertigo appeared. When certain movements of the head or the eyes alone provoked the sensation of vertigo, he caused these movements to be practiced to the exclusion of others. After a certain time the use of these manoeuvres induced the complete disappearance of the trouble. He had thus succeeded in curing the vertigo of a patient, which, following on the radical cure of a caries of the petrous portion of the temporal bone, was recognized as having its cause in a lesion of the horizontal semicircular canal.—*N. Y. Med Jour.*

SOME FACTS REGARDING "UREINE."—A. F. Chace and William J. Gies (*Medical Record*) present a comprehensive criticism of the recent paper by Dr. William Ovid Moor upon the discovery of ureine, the principal organic constituent of urine and the true cause of uremia. From the laboratory of physiological chemistry of Columbia University at the College of Physicians and Surgeons of New York, the fact has long been known that normal urine contains substances of a very toxic character. Potassium compounds are prominent among these, but more poisonous still are the various organic bodies of an alkaloidal nature, present in only minute proportions. These writers believe that Moor's method of preparing ureine fails to eliminate completely either potassium salts or the normal basic alkaloidal bodies giving the typical reactions with potassium ferricyanid and ferric chlorid, and the toxicity ascribed to ureine must be referred at least in part to these substances dissolved in it. Summing up they state: Ureine is not a chemical individual. It is a mixture containing several of the organic substances and a considerable proportion of inorganic salts ordinarily found in normal urine. Further, its toxicity can be referred to some of these normal urinary constituents.—*Phil Med. Jour.*

X-RAY BURNS. — Florentine reviews the question of X-ray burns and the precautions which have been recommended. The grounded screen is, he thinks, more or less effective, though not absolutely so, and he suggests the possibility of individual idiosyncrasy as affecting the incidence of these accidents. He suggests that there is no known means of absolute protection, but he gives a list of those which have shown a tendency to help the situation: (1) Short exposures, which are perfectly satisfactory without present approved apparatus and materially reduce the danger. (2) Distance between the active tube and part to be exposed; at least eight inches with the improved apparatus is equally effective and adds sharpness and detail to the negative. (3) Always avoid exposing the part frequently unless the rays are used for their therapeutic results, then the tube should be regulated according to the best knowledge of the effect produced. (4) Where much density is to be overcome and exposure necessarily long, use the protective screen impervious to the dangerous rays. (5) The vacuum should be as high as required to give the best results with the shortest exposure. He also claims that injuries were more frequent immediately following the earlier use of the X-ray than now, and by using the precautions mentioned and with our improved apparatus these may be almost entirely eliminated. It makes no difference whether a Ruhmkorff coil, a Tesla coil, or a static machine is used, their improper use invites danger. There is needless alarm among the laity and we should deal with our patients honestly and wage an active war against fake institutions, and quacks and characters that swindle.—*American X-ray Journal*.

THE PHYSIOLOGICAL INFLUENCES OF THE DUCTLESS GLANDS. —O. T. Osborne (New York Medical Society, May, 1900), says the relationship of many diseases of metabolism usually classed as neurotic is so close to the physiology of the ductless glands that the paper of the author is of interest to the neurologist. Dr. Osborne said that of late years we have come to realize that three glands, whose functions were entirely ignored at the beginning of the century, are absolutely necessary to life. These are the pancreas, the thyroid and the suprarenal bodies. It is not improbable that a fourth set of glands, the parathyroids, are also necessary to life. It is important to remember that at forty-five there occurs physiological under-secretion of the thyroid, and that after this

subjects put on weight and arteriosclerotic and fatty degenerative changes in the heart and blood vessels are liable to occur. At the same time there is increased blood pressure. In infants, it is probable that there is very little suprarenal secretion. As a result, the vasomotor system is not well under control, and thermotaxis, or heat regulation, is very easily disturbed. The atrophy of the thyroid at forty-five is probably associated with atrophy of other important glandular structures in the body. This glandular atrophy bears some important relation to the occurrence of the menopause. In this connection it is important to remember that 80 per cent. of the cases of Graves' disease occur in women. It is not improbable, therefore, that the thyroid in the female is in a state of much less stable equilibrium as regards its physiological condition than it is in the male. The occurrence of at least temporary enlargement during menstruation and of a certain amount of permanent enlargement after pregnancy in many cases seems to indicate that this unstable equilibrium is associated with the vicissitudes of the sexual system. It is probable that all our dosage in order to make up for the absence of secretion of the ductless glands has been too high. Nature does not supply so much material.

Where gigantism occurs it is practically decided that there is always increased pituitary secretion. Oromegaly always means perverted secretion of the pituitary body. A number of cases of tumors of the pituitary body have been reported in which no signs of either gigantism or acromegaly could be noted. It is very probable that in these cases some portion of the gland was left unchanged and normal secretion continued. It must be remembered that in all of the examined cases of acromegaly an enlargement of the thyroid existed. This may have been due to a compensatory enlargement with the intention on nature's part, as it were, of making up for the perverted pituitary secretion. It may, however, have some direct connection with the acromegaly. There are two parts, as it will be remembered, to the pituitary body—the hypophysis cerebri and the infundibulum. This latter portion has some connection with the maintenance of the proper constitution of the blood. Howells has noted that it is affected in such diseases as scurvy and in other severe blood dyscrasias.

Under the administration of pituitary-gland substances certain of the symptoms of acromegaly are often relieved. The in-

tense earache which occurs so often have been known to disappear. The very severe headache so characteristic of the disease may be greatly relieved. There is a certain fullness of the lips and hands, which may become less while pituitary substance is being taken. This may return after use of the pituitary gland is discontinued. Suprarenal-gland material does not raise blood-pressure when it is taken by the stomach, or even when it is administered subcutaneously. It must be put directly into the blood stream by intravenous administration. In this matter a great deal has been said that will undoubtedly injure the cause of suprarenal therapeutics eventually by causing disappointment in the mind of those who trust to the statement of over-zealous enthusiasts.—*Jour. N. and M. Dis.*

THE TREATMENT OF SYPHILIS—A NEW AND TOLERABLE FORM OF ADMINISTERING MERCURY, WITH REPORT OF 65 CASES TREATED AT BELLEVUE HOSPITAL.—Winfield Ayres, M. D., (*Philadelphia Medical Journal*, November 10, 1900), states that when his attention was called to Mercurol as an antiseptic of special value in the treatment of gonorrhoea, it occurred to him that it would be a first class preparation for the treatment of syphilis. Some time was necessarily spent in determining the proper dosage. At first one-eighth of a grain was given three times daily, and this dose was gradually increased until it was found that three grains was the average quantity required to control the malady. The highest amount given was seven grains and the lowest amount that exerted a controlling influence upon the disease was one-half grain. In starting a patient on a course of Mercurol the author advises beginning with half grain or grain doses. Salivation has been produced by two grains, and yet as much as six grains has been taken with no disagreeable symptoms.

The objections to the use of unguentum hydrargyri as a remedy in secondary syphilis are referred to; and while the popularity of mercuric protiodide is conceded, the irregularity of its action and its tendency to cause gastric and intestinal disturbances are not overlooked. In the writer's experience 33 per cent. of his cases were not benefited by this drug.

Mercurol is a nucleid of mercury, and was discovered by Karl Schwickerath, of Bonn, Germany. Kopp, Director of the Royal Polyclinic for Genito-urinary Diseases at the University of

Munich, uses Mercurol in smaller doses, which leads the writer to remark "he will find as I have done, that it is desirable to use a much larger dosage." Mercurol should not be given in solution with potassium iodide.

In all, 65 cases received Mercurol at the Bellevue clinic, 60 of which had not had previous treatment. Of these, 13 did not return after the first or second visit; 14 did not remain long enough under treatment to give the preparation a fair trial; and 13 may be described as new patients. Deducting these 40 cases, there remain 25 cases that have been sufficiently long and regular in their attendance to supply data from which definite conclusions may be deducted. The detailed histories of these 25 cases are included in the paper. In summarizing the author remarks that while two months' treatment of syphilis is insufficient to determine absolutely the value of any remedy, the marked improvement shown by many of his cases makes it certain that Mercurol is of great value. Its superiority to mercuric chloride in controlling the symptoms of syphilis is proved. Like all internal remedies it has very little effect upon the initial lesion; still it has hastened the healing slightly. None of the cases required treatment with potassium iodide to control secondary manifestations.

To recapitulate, (1) Mercurol causes less disturbance of the gastro-intestinal tract than any other preparation of mercury used internally. (2) It controls skin eruptions and pains much better than any other preparation, while it controls mucous eruptions as well as any other, and has equally as good an effect upon the chancre. (3) It is an advantage that it can be taken in pill form.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

ICE PER RECTUM IN NARCOTIC POISONING.—Dr. Willis Cummings, of Brooklyn, recommends placing ice in the rectum in narcotic poisoning. He reports several cases (*Werck's Archives*) in which this method has served him well.

ICE TO BASE OF BRAIN FOR CURE OF VOMITING.—A physician (*Dietetic and Hygiene Gazette*) says he has cured many cases of vomiting occurring in various diseases by applying ice to the back of the head and neck. His theory is that nausea has its seat in the brain and not the stomach. The remedy is worth remembering.

TONSILS AS PORTALS OF INFECTION. — Dr. Julius Ullman (*Med. News*, January 26, 1901), concludes a very interesting paper on the above subject, with the conclusion that the tonsils, when normal, have a physiologic function which probably protects the organism against infection; but that when diseased this function is abrogated and that many grave general infections take place through them. He suggests a more careful post-mortem examination of the tonsils in fevers of uncertain origin.

HEAD OF TIMOTHY IN BRONCHUS FOR TWO AND A HALF YEARS.—W. A. Jolly, M. D., of Rawlins, Wyo., reports in the *Philadelphia Journal*, January 5, 1901, the case of a man who went west for supposed tuberculosis, suffering from cough, hemoptyses emaciation, etc. He supposed he had swallowed the timothy head. He had, however, evidently inhaled it, inasmuch as after a hard coughing spell he spat up what was supposed to be a piece of lung tissue, until, upon examination, it proved to be the head of timothy he had inhaled two and one-half years previously. He began to improve at once and is now (eighteen years after) in perfect health.

CLOSURE OF CUTANEOUS WOUNDS WITHOUT SUTURE.—Howard Silventhal (*N. Y. Med Jour.*, February 9, 1901), recommends the closure of cutaneous wounds by the use of sterilized zinc-rubber plaster. If the wound be deep the deeper structures are united as usual with buried sutures and the plaster applied to coapt the skin. The healing by this method is more perfect and aseptic, and takes less time than does suture. The skin must be thoroughly dried with alcohol and ether and all bleeding stopped before the plaster is applied. The plaster is applied in strips six inches long and from an eighth to a quarter of an inch wide. On bulging surfaces the strips are laid at right angles to the wound

and in depressions at an oblique angle. They are removed on the sixth day, when the wound is simply covered with dry sterile gauze. If in any part of the wound the coaptation has been imperfect and the union is therefore not complete, a dry aseptic dusting powder is used. The method is not applicable where there is tension. Johnson and Johnson puts up a plaster especially for this purpose. It is sterilized and cut in strips and each box contains enough strips for a wound six inches long. It is sold under the trade name of Z. and O. strips.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, and the Allen County Orphan Asylum
Professor of Laryngology and Rhinology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

RESORCIN AS A PRESERVATIVE IN SUPRARENAL EXTRACT SOLUTION.—In an article upon this subject in a recent number of the *New York Medical Journal*, Dr. S. Openheimer says that the suprarenal solutions undergo putrefactive changes, owing to the large proportion of animal matter present, unless something has been added to prevent these changes. In a series of experiments he found that by the use of a 1 per cent. aqueous solution of resorcin, an almost permanent solution of suprarenal capsule may be produced, thus doing away with the annoyance of having to prepare a fresh solution whenever the drug is to be applied. The addition of resorcin, while preserving all of the useful qualities of the suprarenal capsule, does not act as an irritant to the mucous membrane.

(We have found P. D. & Co.'s Adrenalin Chloride solution preferable and so far as known not subject to deterioration.—Ed.)

SWIMMING POOLS AS AN ETIOLOGICAL FACTOR IN THE PRODUCTION OF CATARRHAL DISEASES OF THE UPPER RESPIRATORY TRACT.—Dr. L. F. Flick, in a recent number of the *Philadelphia Medical Journal*, gives an interesting history of several cases of

an apparently infectious catarrhal inflammation of the nose, which occurred in his immediate family last season, all of which were supposed to have been caused by infection introduced into the nose at a public swimming pool where the family were accustomed to going several times each week.

It was discovered that a certain individual, suffering from a grave catarrhal inflammation of the nose, was accustomed to swimming in the pool frequently, and soon after the beginning of his attendance at the pool other visitors were attacked with a similar inflammation. No bacteriological investigations were made, but it seems almost conclusive proof that the disease was communicated through the water, notwithstanding the fact that there is a running stream in and out of the pool during swimming hours and the pool is thoroughly cleansed once a week.

Dr. Flick believes that swimming pools may be a very prolific source for the starting of infectious diseases, and thinks that the habit of bathing in public pools is attended with some danger, unless some rigid rule is adopted whereby individuals suffering from infectious diseases of any type are excluded from the pools.

THE USE OF THE SUPRARENAL GLAND IN PERSISTENT EPISTAXIS.—Dr. Lewis S. Somers (*Philadelphia Medical Journal*) advocates the use of the aqueous extract of the suprarenal gland in persistent epistaxis, and claims to have had exceptional results in the treatment of those cases which have extended over a long period of time and in which the usual gamut of procedures have been used and proved unavailing. Theroetical studies of the suprarenal gland would seem to indicate that it possessed qualifications rendering it superior as a local hemostatic and vasomotor constrictor to all other remedies, and practical observation proves this to be the case. It has no effect on the blood itself, that is it does not produce a clot, but within a few seconds' time, after it has been applied to the mucous membrane, blanching of the surface ensues and from its remarkable constricting action on the muscle fibres of the vascular walls, the small arterioles contract to such an extent that it is impossible for the blood to flow through them.

When the suprarenal gland is used in those cases in which there is a pathological condition characterized by congestion and erosion of the mucous lining, the results obtained clearly indicate

that it possesses still farther action than that of vascular constriction, and this is shown by the rapid changes taking place in the physical condition of the parts. The erosions heal and a general nutritive tone is given to the tissues that no other local remedy seems to possess. In addition to the drug being the most remarkable vasomotor constrictor that we possess, it is therefore of great value for its local nutritional effects and its power of acting as a pure muscle tonic. (Our attention has recently been called to an already prepared solution of Adrenalin Chloride, made by the well known house of Parke, Davis & Co., which seems to possess superior merits as a staple and aseptic solution for use in all those cases in which the suprarenal gland is indicated. We have had occasion to use the solution in various strengths, and can highly recommend them as filling all the requirements of a freshly prepared solution of suprarenal gland.Ed.)

THE EYES OF SCHOOL CHILDREN.—An interesting article upon this subject, by Dr. F. C. Heath, of Indianapolis, was presented before the Indiana Health Conference on June 22nd, 1899. Attention is called to the fact that many school children's eyes are injuriously affected by the requirements of school life, and the readers in sanitary matters are asked to give the subject attention, so that proper reforms may be adopted.

Dr. Heath advocates the frequent examination of school children by competent oculists, for the purpose of detecting uncorrected eye strain, which is responsible for many of the pathological lesions found in the eyes of school children. When discovered the eye-strain should be corrected by suitable glasses, and parents should be encouraged to make it possible for their children to do more and better work by such attention.

Dr. Heath also believes that one of the first requirements in the way of reform is a modified curriculum. The number of studies pursued by the average pupil in our public schools is certainly too large for children in feeble health or with defective eyes. It is not uncommon for children to devote ten or twelve hours a day to study in school and at home. How can they do this and get sufficient recreation? How can they help suffering from eye-strain and other physical ills? Aside from this these pupils are often reading when they should be sleeping. The necessity for frequent intervals of rest is apparent, and this can be accomplished

by short intermissions. The necessity for good light in our school buildings is also important as bearing upon the subject of hygiene of vision. There should be at least one-sixth as much window space as floor space, and the direction of the light should come preferably from the left side and the rear. Too many blackboards, with their polished surfaces, cause annoying reflection of light, thus causing the pupil to bend over to avoid the glare, and by so doing congest the eyes. Improper heating or ventilating also has its effects upon the eyes as well as the general system.

The selection of books is also an important one, the comfort and healthful condition of the eyes depending upon books printed upon a thoroughly opaque paper, with either a dead white or cream surface, and sufficiently thick to prevent the shadow or shape of the type on the opposite side to be seen through the paper. Type no smaller than our 10 point or primer size should be used, and two columns are better than quarto lines.

If our school boards would give more attention to school hygiene, and particularly to that portion of it which has to do with the health of the eyes, there would be fewer near-sighted, cross-eyed and weak-eyed children.

OTITIS MEDIA AND ITS TREATMENT.—Dr. H. V. Wurdemann, in the *Philadelphia Medical Journal* of February 2nd, begins an article upon this topic by saying: "How long will it be before the average citizen will recognize the seriousness and importance to life of inflammation within the ear?" He then says that properly treated or seen early enough, acute inflammation of the middle ear seldom or never results in chronic suppuration, and when chronic suppuration of the middle ear does exist it is positively the result of either neglect, improper or insufficient treatment.

The necessity for examination of the ear and care of aural inflammation in all cases of grave diseases in children is certainly demonstrated. A considerable portion of all cases that eventually come to the aurist could have been saved the additional annoyance, detention from business and expense necessitated by the complications following the original earache, if they had been originally under scientific treatment. The technique of the treatment of suppurative otitis media is so extremely simple, and the diagnosis is generally so easy, that but little experience renders the general practitioner as skillful as the specialist. Every physician should

possess and be sufficiently familiar with the reflecting mirror and aural speculum, so that he can use those appliances for diagnosis at least in his own practice, and he should have a paracentesis knife in his pocket-case to be used as freely as he does the hypodermic needle.

The indications for paracentesis of the membrana tympani in acute otitis media are summed up by Dr. Wurdemann as follows:

1. Earache is but a warning of perhaps dangerous disease, the pain of which may be masked by opiates to the ultimate risk of the patient's life.

2. If the drumhead is much reddened or bulging, or if fluid is detected, it is advisable to incise the membrane at once before it bursts, as the character, location, and extent of the tissue-destruction is thereby limited.

3. Pain is relieved at once by the paracentesis; the course of the disease is shortened, the symptoms mitigated, and sequelae prevented by this and appropriate after-treatment.

4. If the case is seen after spontaneous perforation, the hole in the drumhead will often be found to be too small or poorly adapted for proper drainage, and it may be advisable to enlarge it by paracentesis.

5. The little operation gives but temporary pain, and if the physician does not make too much of a show, will be tolerated by any patient, who will be thankful for the relief afforded his symptoms.

6. Meddlesome after-treatment should be discouraged, as when the diseased part is protected from further infection, and the discharge not too frequently removed, the case will usually run a mild course.

BOOK REVIEWS.

A CLINICAL TREATISE ON FRACTURES—By William Barton Hopkins, M. D., Surgeon to Pennsylvania Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases. Philadelphia. J. B. Lippencott Company. 1900.

We are told in the preface that the book is composed of unpublished clinical lectures delivered by the author at the Pennsylvania Hospital so revised and elaborated as to eliminate incompleteness and lack of method. The work is divided into nine chapters. The first is introductory, treating of the subject in a general way; and the last discusses compound fractures. The intervening seven chapters treat in a methodical way of fractures of the extremities, spine, sternium, ribs, pelvis, skull and face.

No attempt is made to give all methods of treatment. Sometimes a choice is given of several methods, but as a rule only that method is given which in the author's opinion is best.

The author's style is terse, yet not concise. Numerous skiagraphic and other illustrations assist in elucidating the text. The book is well bound, printed on unusually heavy paper, in plain type, with wide spaces and broad margins. As a practical guide we know of no better work. PORTER.

INTERNATIONAL CLINICS.—Tenth Series. 1900. Philadelphia. J. B. Lippencott Company. Cloth, \$2.00 net per volume.

We have before us Vols. III and IV of this work. Being so well known it seems almost superfluous to state that the aim of the work is to present in the form of a quarterly of about 300 pages, substantially bound in cloth and well indexed, clinical lectures and especially prepared articles on the various branches of medicine and surgery by the leading members of the profession throughout the world.

Since Vol. II was published the names of John B. Murphy, Chicago; Alexander D. Blackader, Montreal; H. C. Wood, Phil-

adelphia; T. M. Rotch, Boston; E. Laudoldt, Paris; Thos. G. Newton, Philadelphia; J. W. Balantyne, Edinburgh, and John Harold, London, have been added to the editorial staff. Among the most noteworthy features of the volumes before us is the symposium on genito-urinary diseases, which is commenced in the third and completed in the fourth volume, and the monograph on etiology and pathology, which occupies the last 107 pages of the fourth volume. Either of these articles is worth the price of a volume. In type, binding, etc., these correspond to former volumes and sustain the reputation of the firm publishing them. Each volume is well indexed and in the fourth volume is a very satisfactory general index. The editors are to be congratulated on having furnished in the tenth series of International Clinics a very valuable and practical work. PORTER.

LESSONS ON THE ANATOMY, PHYSIOLOGY AND HYGIENE OF INFANCY AND CHILDHOOD.—Consisting of extracts from lectures given at Rush Medical College, by Alfred C. Cotton, A. M., M. D., Professor of Diseases of Children; Accoucheur and Physician for Diseases of Children, Presbyterian Hospital; Staff Member of the Central Free Dispensary and the Cook County Hospital; President of the Chicago Pediatric Society; Member of the American Pediatric Society, etc. 100 illustrations. Cloth, \$1.50 net, postpaid. Chicago Medical Book Company, southeast corner Congress and Honore streets, Chicago, Ill.

The anatomy and physiology of infancy and childhood are exceedingly interesting fields of study which have received heretofore insufficient attention. The author has done a good service in presenting the subject in a compact volume of something less than 200 pages this large compass, he has succeeded in putting an interesting and varied lot of information which had as heretofore been necessary to search for through numerous and varied text books. The book is commended not only to junior students, for whom it is especially announced, but for practitioners of medicine as well who desire to be able to quickly refresh their memories upon the subject matter with which it deals.

The book is well written and fully illustrated and will be a distinct addition to anyone's working library. G. W. M.

A TEXT BOOK ON PRACTICAL OBSTETRICS.—By Egbert H. Grandin, M. D., Gynecologist to the Columbus Hospital; Consulting Gynecologist to the French Hospital; Late Consulting Obstetric and Obstetric Surgeon of the New York Maternity Hospital; Late Obstetrician of the New York Infant Asylum; Fellow of the American Gynecological Society, of the New York Academy of Medicine, of the New York Obstetrical Society, etc., etc., etc., with the collaboration of George W. Jarman, M. D., Gynecologist to the Cancer Hospital; Instructor in Gynecology in the Medical Department of the Columbia University; Late Obstetric Surgeon of the New York Maternity Hospital; Fellow of the American Gynecological Society, of the New York Academy of Medicine, of the New York Obstetrical Society, etc. Third Edition, Revised and Enlarged. Illustrated with fifty-two Full-Page Photographic Plates and One Hundred and Five Illustrations in the Text. $6\frac{1}{2} \times 9\frac{1}{2}$ inches. Pages xiv—511. Extra Cloth, \$4.00 net; Sheep, \$4.75 net. F. A. Davis Company, Publishers, 1914-16 Cherry street, Philadelphia.

That three editions of this work have appeared within six years is sufficient proof of worth.

In the present has been added a chapter on emtriology and the anatomy of the female genital organs. Some of the plates have been reduced in size. As in the former editions, the authors refrain from presenting burdening masses of statistics and opposing and confusing theories. The facts are tersely stated, and where divergent views obtain only those are given which in the author's opinion bear the weight of authority.

This style makes the book an unusually satisfactory one to him who consults it for direction on any particular point pertaining to the subject.

The omission of the subject of spontaneous abortion is to be regretted and the reviewer feels confident that the addition of a chapter on this subject would add to its value in the opinion of the vast majority of those who read the work. PORTER.

STUDENTS' EDITION, A PRACTICAL TREATISE OF MATERIA MEDICA AND THERAPEUTICS, with special reference to the Clinical Application of Drugs. By John V. Shoemaker, M. D., LL. D., Professor of Materia Medica, Pharmacology, Therapeutics,

and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College, of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the American Medical Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, etc., etc. Fifth Edition. Thoroughly Revised. $6\frac{1}{4} \times 9\frac{1}{2}$ inches. Pages vii-770. Extra Cloth, \$4.00, net; Sheep, \$4.75, net. F. A. Davis Company, Publishers, 1914-16 Cherry street, Philadelphia.

A new edition of this popular work designed especially for the use of medical students is a new departure in the publication of standard works of this character and has many features to commend it. The larger work published by the author in the preceding edition contains much matter that the student could with advantage pass over until his post-graduate days. The book is of very convenient size, is well arranged and can be commended to students of medicine as one of the best works upon this subject for use during their college days. The newer remedies are fairly well represented, especially those which have earned an unquestionable title to recognition, although it is neither possible nor desirable to include everything with which the market is flooded, even admitting that they have for the most part some considerable value as therapeutic agents.

An excellent clinical index furnished suggestive hints as to the medicinal treatment of the principal diseases.

The book will undoubtedly be heartily welcomed by the large army of American medical students and we will watch with interest the result of this experiment in the method of issuing separate volumes for different classes of medical readers.

G. W. M.

INJURIES TO THE EYE IN THEIR MEDICO-LEGAL ASPECT.—Injuries to the Eye in their Medico-Legal Aspect, by S. Baundry, M. D., Professor in the Faculty of Medicine, University of Lille, France, etc. Translated from the Original, by Alfred James Ostheimer, Jr., M. D., of Philadelphia, Pa. Revised and Edited by Charles A. Oliver, A. M., M. D., Attending Surgeon to the Wills Eye Hospital, Ophthalmic Surgeon to the Philadelphia Hospital; Member of the American and French Ophthal-

mological Societies, etc. With an Adaptation of the Medico-Legal Chapter to the Courts of the United States of America, by Charles Sinkler, Esq., Member of the Philadelphia Bar. Philadelphia, New York, Chicago. The F. A. Davis Company, Publishers. 1900.

This excellent work of 160 pages is intended as a guide for the expert, and to make it easier to estimate accurately the damage caused by injury to the visual apparatus. To this end the author has presented in this monograph a concise account of the traumatic lesions of the eye and its adnexa, treating them especially from a prognostic standpoint.

As traumatic lesions of the eye and of its adnexa frequently result in suits for damage and often require the opinion of an expert by a corporation or by an individual, or to give answer as to the visual function of persons whose interest induces them to assert that they cannot see or that they do not see sufficiently well to pursue their occupation, it is necessary for one who is so called upon to have not only a profound knowledge of both the internal and external diseases of the apparatus, but fully understand their medical significance. Professor Baudrey's work will not only be of value in the consideration of injuries to the eye from the medical aspect, but will assist the expert in presenting the facts in a legal manner before the courts in accordance with suggestions given in the final chapter, relative to the mode of procedure to be pursued in a medico-legal examination.

The importance of the work is fully attested by the fact that two editions have already been published in France, and it may be reasonable to expect that the translation, under the editorship of Dr. Charles A. Oliver, will prove of so much value to the medical profession in America that a second edition will be required here.

We would especially comment on the excellence of the chapters dealing with simulated or exaggerated affections of the eye and methods of detecting the same. This chapter alone is worth the price of the book, owing to the frequency with which specialists encounter cases of simulated blindness, and the difficulty with which the dishonesty is detected in some cases through lack of knowledge as to the proper procedure to be adopted to discover the deception.

It is needless to add that the publishers have done their work in a satisfactory manner.

A. E. B.

FORT WAYNE MEDICAL JOURNAL-MAGAZINE.

VOL. XXI.

APRIL, 1901.

No. 4.

ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted
in this department.

THE DIAGNOSTIC IMPORTANCE OF THE EXAMINATION OF THE FECES.*

By CHARLES D. AARON, M. D.
Detroit.

Professor of Clinical Gastro-Enterology in the Detroit College of Medicine;
Consulting Gastro-Enterologist to Harper Hospital, etc.

Scientific progress burdens the modern practitioner with a number of duties, which were out of the scope of the old practitioners. These additional tasks would seem to be a hardship for him in the pursuit of study and in the performance of responsible duties. This thought is in my mind just now, for I propose to submit a phase of our practice which is destined to become an inevitable part of general medicine, I have reference to the examination of the feces in several ways and according to various methods. Nothnagel (1) says that the examination of the feces has a greater importance for pathology and diagnosis of intestinal diseases, than the examination of the sputum has for the diagnosis of diseases of the respiratory apparatus; for very often we depend upon it alone for the diagnosis of intestinal diseases. The examination of the feces cannot be said

*Read before the Ann Arbor Medical Club, Ann Arbor, Mich., March 13, 1901, and Allen County Medical Society, Fort Wayne, Ind., April 2,

to have been recommended by indifferent authorities, for earnest workers such as Nothnagel, Rosenheim, Boas, Ewald and Einhorn stand sponsors for it and it has become within a very short while, a regular feature in diagnosis with gastro-enterologists—an essential in the diagnosis of intestinal diseases. It enables us to determine the results which follow pathological changes and to study the secretion, absorption and motor functions of the stomach and intestine. Through it we can decide what is abnormal and foreign in the contents of the intestine. Frequently by it alone we can establish the kind and the place of the intestinal disease, and our proof of the presence of intestinal parasites is in a large measure based upon the microscopical examination of the feces.

Despite the fact that its utility is obvious, the examination of the feces is still far from having become a common practice among medical men in the diagnosis of intestinal diseases. There are several reasons for this. In the first place the material dealt with is repulsive and involves unpleasant manipulations which the physician is naturally reluctant to employ. In the second place it must be admitted, the examination of the feces does not always give a final diagnosis, but serves rather as an adjuvant to other signs. The recovery of the patient, however, should be the all-important aim of the physician and for this reason alone he should dispose of all hesitations and be willing to do what he can, in order that he may arrive at a proper diagnosis. So far as the diagnostic value of the examination of the feces is concerned it must be admitted that one examination is insufficient and will not clear up the pathological condition, any more than will a single examination of any other secretion or excretion.

Feces are a mixture of such remnants of food, as have not been digested and absorbed by the body, of intestinal secretions and exfoliations, of bacteria and of salts which arise as products in the process of digestion. The average amount evacuated in 24 hours is 120 to 160 grammes and varies with the kind of food taken. It is a remarkable fact that dejections take place even in cases of starvation, consisting of bacteria, metamorphosed epithelium, and intestinal juices. The color of normal feces is dark brown due to stercobilin, which is always present in the feces and is analogous to urobilin. Normal feces never contain either biliverdin or bilirubin. When no bile enters the intestinal canal, the feces are light, owing to the absence of the biliary coloring matters and the presence

of undigested fats. Diet influences the color of the feces, especially milk, which gives them a light, yellowish appearance, and certain medications also color them as calomel, iron, bismuth, et cetera. Atmospheric air darkens the feces by oxidation, so that exposed feces are darker than they were at evacuation. Normal feces never give the Gmelin reaction for bile pigments. If feces are examined at necropsy from the rectum upward we do not get the Gmelin reaction until we reach the lower part of the ileum, rarely in the caecum and almost never in the colon. This reaction, therefore, in the feces is indicative of increased motility of the intestine, from which we may conclude that Gmelin reaction in the feces is indicative of a pathological condition. The more intense this well-known reaction is, the higher up the disease is situated.

The normal feces are soft and sausage shaped. When they are shapeless, mushy or fluid we have an indication of some pathological condition. In general the more quickly the feces pass through the colon the softer and more fluid they are, for when they do not remain long in the jejunum or ileum, there is little time for absorption and increased peristalsis causes the unabsorbed substances to be rapidly carried off. The longer they remain in the colon the drier and harder they are, and at times, produce the familiar scybala. These latter are small round balls, like and somewhat larger than sheep's dung; the size and form being due to the fact that the feces yield up the water to the walls of the intestine. Pencil shaped or flattened feces are often found in a stenosis of the rectum, frequently in nervous conditions and in patients suffering from starvation.

The normal odor of the feces is due to skatol and indol. When the intestinal contents stagnate, we have as a consequence, their decomposition, fermentation and putrefaction. In ulcerative carcinoma of the colon or rectum, the odor of the feces is foul. Schmidt (2) has devised a method by which he is able to test the watery extract of the feces and approximate the quantity of gas which develops from the carbohydrates. The method is new and complicated and we cannot say much about its value as yet.

Thin fluid feces can be examined microscopically without difficulty; we must look for food remnants, bits of mucous membrane, blood corpuscles, pus cells, epithelium, mucus, bacteria and crystal formations. Food remnants are found in both normal and

pathological conditions. Muscle fibre are present normally after a rich meat diet. It was formerly thought that the presence of large quantities of muscle fibre in the feces was an indication of pancreatic disease; but we know now that this is not true. (3) The digestion of starch should be good in normal and in diseased conditions of the intestine, but when it is found in any considerable quantity, we have an indication of a pathological condition. This may be suggestive of a hyperchlorydria or any condition which causes a rapid peristalsis of the small intestine. For the same reason we find, in *acute catarrh of the small intestine* with increased motility of the colon, undigested well-preserved particles of food. These under the microscope prove to be muscle fibre, starch granules in good preservation and fat admixtures. The diagnosis of *catarrh of the small intestine* demands proof by the presence of an abundance of muscle fibre and of starch.

Some fat occurs in the feces when ingested in large quantities, but it indicates a pathological condition when found in unusual quantities. Fat crystals consist either of fatty acids or soaps. The fatty acids are short bent needles, while the soaps are of the shape of long needles arranged in the form of a fan. The presence of an abundance of fat is suggestive of pancreatic disease, for in diseases of the pancreas the fat has not been emulsified and it passes off in the feces undigested. When we have no fat in the feces, we cannot exclude pancreatic cysts, for cysts have their seat usually in the body and tail of the pancreas and do not prevent the secretion of the pancreatic juice nor its emptying into the intestine. Again an abundance of fat, accompanied by a closure of the gall-ducts and a discoloration of the feces up to a light gray with a peculiar odor, is what we find in icterus.

If pus cells are present in the feces in great numbers they hint to ulcer or perforating abscess opening into the intestinal canal. Pus may be expected in the feces only when the ulcers have their seat in the colon, especially in its lower segments. Inasmuch, as the ulcerations occur generally in the *small intestine*, and the pus is more easily mixed with the feces here, we cannot assume that the absence of pus in the feces excludes an ulcer in the intestine. Pus is found in the feces in other diseases besides ulceration and is found especially in intestinal carcinoma. Here we have characteristic fecal evacuations of a foul odor, containing pus and blood, and in

rare instances, particles of the carcinoma. The farther down in the intestine the seat of the carcinoma lies, the more clearly will these abnormal bodies appear. We can thus see that the examination of the feces is quite important for the diagnosis of intestinal carcinoma. Blood in the feces may be due to a number of causes, as trauma, constipation, hemorrhoids, enteritis, dysentery, purpura and other general diseases which may lead to loss of blood. Blood from the dilated veins of the mucous membrane of the rectum, without visible hemorrhoids, may be easily misunderstood. An examination of the rectum by means of the finger and the speculum, however, leads quickly to the right diagnosis. *Simple*, and especially *chronic* enteritis occasions loss of blood very rarely. *Intestinal ulcer* arises under definite etiological presuppositions; typhoid fever, tuberculosis, et cetera, and are sufficiently recognizable through other clinical data so that they cannot be misunderstood. Wherever a cause exists which suggests *intestinal ulcer*, we must regard loss of blood in the intestine as a significant item, which indicates to a great probability intestinal ulcer. In ulcer of the stomach, after a severe hemorrhage has taken place, the dejections are black. In some cases the tarlike character of the feces is the only evidence that hemorrhage has taken place in the stomach. The feces should always be examined in suspected gastric-ulcer. The diagnosis of the tubercular nature of intestinal ulcers requires that the feces should show positively that tubercle-bacilli are present; for this *fact* makes the diagnosis positive in the cases where intestinal ulcers are suspected, especially when we have no lung affection. When we have a tuberculosis of the lungs, the presence of tubercle-bacilli in the feces is not pathognomonic; for the bacilli may have entered the intestine by way of the sputum and thus swallowed; but the more abundantly and the more regularly these bacilli are found in the feces, the more probable is the diagnosis of intestinal tuberculosis.

Mucus in the feces is always indicative of some pathological condition. Macroscopical mucus in the form of membranes originates from the colon and suggests membranous enteritis. Other mucus is suggestive of catarrh. In some cases of catarrh of the colon, there are secreted large unconnected whitish masses which are daily evacuated with severe colicky pains. These are either in membranous or cylindrical forms and may arise in the course of a chronic enteritis, for the presence of round cells and of epithelium in

these whitish masses point to this. Should there be no catarrh present, the passing of these membranes suggest membranous enteritis. As to their constituency, we may say that it is not always the same; at times the membranes consist of mucin entirely, sometimes there is a mere trace of mucin and the membranes may be of an albuminoid substance. In *acute intestinal catarrh* the mucous masses from the small intestine are mixed intimately with the feces, and it is not possible to detect mucus macroscopically, but microscopically the mucus can be easily found. We may prove the presence of mucus readily when the colon is affected, for the increased peristalsis forces the feces rapidly downward through the intestine.

The dominating symptom in cases of acute inflammation of the intestine is diarrhoea. The feces are usually thin and mushy, yellow and greenish, in rare cases they are tinged with blood and in most cases they plainly contain mucus. When the evacuations follow quickly, the feces become more and more colorless, since the pigmentary constituents are relatively reduced. The odor is not fecal, but somewhat sour and at times they smell foul and are foamy. The microscopical examination shows the presence of undigested food particles, round cells, numerous cylindrical epithelium which appear enlarged, having an unclear nucleus. We find also in the excrement micro-organisms of various sorts: cocci, bacilli, yeast fungi, et cetera. All these micro-organisms have very little clinical significance, because they are also found in the normal feces. The crystals which are here found, such as those of the triple phosphate, calcium salts and cholesterine, have no diagnostic significance. The most important item in the diagnosis of *chronic catarrh of the intestine* is the presence of the mucus. It is never absent in chronic catarrh and can always be found if the feces be observed for some time. Its presence determines the diagnosis. Whenever masses of pure mucus are evacuated, we have a catarrh of the rectum, and when the catarrh has its seat farther up the colon the scybala are enveloped in mucus. If we find microscopically, along with the mucus which is visible to the naked eye, particles of mucus mixed with the formed feces, we may conclude that we deal with catarrh of the small intestine in addition to catarrh of the colon. Still more important, however, are the yellow grains of mucus or the yellowish brown soft lumps described by Nothnagel. Their color being due to bile pigment, proves that they have their origin in the small intestine.

Crystal formations are frequently found in the feces. In a long continued catarrh of the intestine, hematoïden crystals are frequently found. Cholesterine in the form of well developed rhomboid tablets occur very rarely. Amorphous cholesterine is present in normal feces, but it has no diagnostic significance. Charcot-Leyden crystals occur in the feces and are at times visible under the high power. In 1892 Lichtenstern (4) pointed out that these crystals are coincident with intestinal parasites. In fact, he proved that they were the cause of the presence of these crystals in the intestine. Thus it can be seen that these crystals are of a great diagnostic value and if found in the feces, we may with some certainty conclude that the patient is inhabited by intestinal parasites. Lichtenstern establishes the fact that Charcot-Leyden crystals are found in secretions of such intestinal portions as experience shows are the seat of worms. Their absence on the contrary does not prove the absence of parasites. The presence of parasites may be further established by the finding of their eggs which are visible under the microscope.

The discovery of gall-stones in the feces is a diagnostic aid. Boas has devised an apparatus by which he can separate gall stones from the feces. It consists of two tin funnels which are connected at their bases by a hinge. The lower part has a fine sieve. The upper spout has a rubber tube so that it can be readily connected with a faucet of running water. After the feces have been put into the sieve and the tube connected to the faucet, water can be allowed to run through for several hours, and we can thus readily find the gall-stones, if any are present. The apparatus helps in the finding of pancreatic calculi, enteroliths and foreign bodies. I have found it exceedingly valuable. It is always important to know whether the stones are faceted or not. Faceted stones are multiple and are in the gall-bladder; round stones may be either multiple or solitary, and may originate either in the gall-bladder or in the biliary ducts.

Micro-organisms have their habitat in the healthy body as much as in the diseased. In the intestine they have a physiologic as well as a pathogenic significance. The yeast fungus occurs in nearly every fecal evacuation and in infantile diarrhoea it is sometimes found in astonishingly large numbers. We can attain a high degree of probability as to the condition of the intestine by ascertaining the bacterial activity within the intestine. Since the dis-

covery of the cholera vibrio by Koch (5) the study of bacteria in the feces has become comparatively easy. Escherich (6) found in the case of milk feces a very clear evidence that the bacteria in the intestines depend upon the food-stuffs and that a modification of the bacteria always took place when the diet was varied. The kind of bacteria and their multiplication and diminution depend almost entirely on the kind and mass of food. The main condition in the development of bacteria in the intestine is the chemical character of its food contents. The meconium offers different conditions for the development of bacteria from those which milk feces offer and these again differ from those of meat feces. Each kind of condition determines the respective kind of bacteria. Billroth maintained that there are more bacteria in the large intestine than in the small intestine. Escherich explains this by saying that the food mass, after leaving the stomach, becomes very much thinned through the bile, pancreatic and intestinal juices, and becomes correspondingly unfavorable to bacteria. This mass remains in the small intestine only a short time, so that these germs are given little time for multiplication. In the large intestine, however, the food mass moves more slowly, and the intestinal germs are afforded a better opportunity for multiplication. Many bacteria of the intestine have the power to produce certain diseases under conditions which are not yet entirely defined. It seems also that one and the same species of bacteria can cause now a lighter and again a more aggravated condition of the intestine. People seem to endure a harmless bacterium, as for example the bacillus coli communis, generally without injury, while again it may be the cause of catarrh of the intestine, dysentery, appendicitis, cholangitis, peritonitis, meningitis and other diseases.

Bacillus coli communis always occurs in the feces, and is present in the milk as well as the meat feces. It does not feed upon the foods which are introduced, but seems to feed upon the secretions of the intestinal wall, although some authorities state that it lives upon the carbohydrates in the tract, withdrawing from the body a corresponding amount of these, and may therefore be regarded as a source of injury to the organism. Roos (7) believes the bacillus coli communis is an important factor in the production of the normal paristaltic action of the intestines. He cultivated the coli bacillus and enclosed the culture so obtained in gelatine capsules which were then coated with collodion and keratin so as to make sure that they

would pass through the stomach into the intestine undissolved. These capsules were administered to several patients who were relieved for a couple of weeks of the constipation from which they had previously suffered. Some difficulty may be experienced in differentiating this bacillus from the Eberth bacillus of typhoid fever to which it bears a close resemblance.

Bacillus lactic alrogenes is present in large numbers in the intestinal canal of patients who feed on milk. It possesses proteolytic qualities in the same slight degree as the *bacillus coli communis*. Escherich says that the most significant character is its capacity to ferment sugar of milk quickly. No other intestinal bacterium has that power. Since it ferments sugar or milk without the presence of air its influence on the intestine of infants is great. It resembles the *pneumobacillus* of Friedlander in behavior and development. *Proteus vulgaris*, Hauser, has been found along with *bacillus coli communis* in dysentery. Baginsky came upon it in the evacuations of infants suffering from diarrhoea. It decomposes and putrefies albuminous bodies. *Bacillus putrificus coli*, Bienstock, decomposes albumin, but more slowly under exclusion of air. Boas found this bacillus in the stomach contents. *Bacillus liquefaciens ilei*, decomposes meat with the odor of old cheese. *Bacillus butyricus*, Prazmowski, occurs in the feces in which starch and vegetable remnants are abundant. Boas has found it in the empty stomach. It ferments starch, dextrin, sugar and lactic acid into butyric acid, carbonic acid and water, but cannot ferment sugar of milk into butyric acid. Its pathogenic significance is important because of its specific fermentation. Lesage, (8) experimenting on rabbits, has produced a diarrhoea of short duration by intravenous injections of the bacillus of green diarrhoea and by the introduction of it into the stomach. Besides the many other bacilli which have been found in the feces, many cocci have been isolated.

Amoebic dysentery is due to a specific organism, *amoeba coli*, which is the cause of this variety of dysentery. (9) The *amoeba coli* is always present in the stools of these dysenteric patients, and also in the walls of the large intestine which they penetrate, causing necrosis and sloughing of tissue and forming the dysenteric ulcers. Where abscesses in the liver occur in connection with dysentery, the *amoeba coli* can almost always be found in the pus. They can usually be demonstrated without staining.

It will be seen that the study of the feces opens up a broad

territory which is yet to be explored. It is to be regretted that the subject has as yet gone little farther than the laboratory, though its general value was recognized long ago and promised to be of great help to the practitioner. Substantial service, however, will undoubtedly be rendered by it eventually in the diagnosis of intestinal affections. To do this we shall have to distinguish between the different elements found in the feces, and this will require careful study of the many aspects which are involved according to the dictates of modern laboratory methods and progressive medical science.

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- 32 Adams Ave., W.

SOCIETY PROCEEDINGS.

MARSHALL COUNTY MEDICAL SOCIETY.

The twenty-third annual meeting of this society was held in the City Hall of Plymouth, Ind., on Thursday, April 11, 1901. Dr. T. A. Borton welcomed the members and invited guests. Dr. A. C. Holtzendorf, the president, was in the chair. Dr. N. B. Aspinwall is the efficient secretary of the organization. The society was called to order at 1:30 p. m., and the following papers were read and discussed:

Some of the Fallacies and the Value of the Gastro-Diaphanes
in the Diagnosis of Stomach Disease.....

.....Dr. G. W. McCaskey, Fort Wayne

The X-Ray in Diagnosis.....Dr. Miles F. Porter, Fort Wayne

Tetanus.....Dr. G. W. Thompson, Winamac

Anaesthesia.....Dr. Charles O. Wiltfong

Coll. of Physicians and Surgeons, Chicago.

Appendicitis.....Dr. C. A. Dougherty, South Bend

After reassembling the following papers together with the discussions thereon, were listened to:

Mircoscopic Aids in Diagnosis and Treatment of Pneumonia

.....Dr. D. J. Loring, Valparaiso, Ind.

What Can We Do for Our Cataract Cases.....

.....Dr. Geo. W. Van Benschotten, South Bend

At present the society meets but once a year. We would suggest that it meet at least once per month. Most, if not all the papers read at this meeting will appear soon in the Journal-Magazine. The meeting was a very pleasant and a very profitable one.

P.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

A DANGEROUS PHARMACEUTICAL PREPARATION.

A new preparation of arsenic known as cacodylate of sodium, which has been highly recommended by the manufacturers and endorsed by some members of the profession as being a remedy that can be given without fear of injurious influences, has been thoroughly condemned by Dr. Wm. Murrell. It has been found that the drug contains as high as 50 per cent. of arsenious acid, and that contrary to the recommendations of the French physicians and manufacturers, it cannot be given in the doses recommended without producing in most cases alarming symptoms of arsenic poisoning. Physicians are therefore cautioned to use the drug, if at all, in doses of very much smaller quantity than those recommended by the manufacturers.

A. E. B.

MICROBES IN UPHOLSTERY.

At the present time the members of the Paris board of health are conducting a series of experiments to prove that the Paris theatres are filled with microbes. The report of the committee goes on to say that the air of some of the Paris theatres is little better than dusting, and the authorities are urged to insist upon better ventilation and the substitution of leather for plush upholstery.

This leads us to remark that if the Paris theatres, with their plush upholstered seats, are so thoroughly alive with microbes, what can be the condition of our American Pullman cars, with their abundance of heavy draperies, plush upholstery and vitiated atmosphere. We are firmly convinced that the necessity for leather upholstery and proper ventilation in our railroad trains is very much more necessary just at the present time than insisting upon this reform in American theatres which a contemporary informs us are as deserving of attention as the play houses of Paris.

A. E. B.

VIVISECTION AND ANTI-VIVISECTION.

A recent number of the *Philadelphia Medical Journal* contains some very interesting correspondence between Mr. James M. Brown, President of the American Humane Society, and Professor Wm. W. Keen, ex-president of the American Medical Association, relative to the evidence presented before the Senate committee at Washington, concerning the bill for regulation of vivisection.

Mr. Brown questions Professor Keen's reputation for truth and honesty because of a statement before the Senate committee, that of the inhuman experiments mentioned in the pamphlet issued by the American Humane Society, the fact of their performance could in but one or two instances be proven, and that the references opposing vivisection were vague, misleading, garbled and inaccurate.

Dr. Keen takes up the charges one by one, answers them in detail, and, while answering the indictment, takes occasion to so thoroughly and accurately prove not only the fallacy of the charges, but the untruthfulness of much of the evidence presented in the pamphlet of the American Humane Society, that we believe that when Mr. Brown again attempts to call some one to the bar of justice for opposing schemes of the American Humane Society, he

will select some one not quite so thoroughly posted and capable of defending himself and his teachings as Professor Keen.

The correspondence will certainly prove interesting reading, and we are awaiting with considerable curiosity the next move of Mr. Brown, who has certainly been placed in a very unenviable position.

A. E. B.

REPORT OF THE COMMITTEE ON ANESTHETICS.

The final report of the committee on anesthetics of the British Medical Association has been published. The committee has been working for ten years to determine the relative safety of anesthetics and the best methods of administration and restoration. The report is based upon 25,920 cases. Ether is accepted as the safest routine agent (excepting nitrous oxide).

No method of administering chloroform is free from danger. Experience on the part of the anesthetist constitutes the greatest safeguard.

As to the best method of restoration no conclusion was reached by the committee. The chief danger from chloroform is circulatory failure. Prolonged vomiting and weakness of circulation is more common after chloroform than after ether. The respiratory complications occurring after ether were more transitory and trifling than were those occurring after chloroform. Save the last the conclusions of the committee confirm opinions long established.

The work of the committee will not have been in vain if it results in a wide acceptance by the profession of the fact that *experience* on the part of the anesthetist is the best safeguard, and that generally speaking, the danger from anesthesia is much greater than the danger from the operation *per se*.

M. F. P.

PARTIAL RECOGNITION OF QUACKERY.

It would seem that the country is to be overrun with the advocates and followers of all sorts of isms and cults, who profess to heal the sick and afflicted. Many of the states of the Union have already passed laws making it legal to practice the so-called osteopathy, christian science mode of healing, etc., and some states have compromised by making laws dividing the practice of medicine in such a way that osteopaths and christian science healers are

not amenable to legal prosecution through violation of legal requirements regarding the practice of medicine.

A bill has been recently passed by the Wisconsin legislature which legalizes the practice of osteopathy and expressly declares that osteopathy cannot be construed to be the practice of medicine and surgery within the meaning of the statutes upon the subject.

It may be doubted whether there is any necessity for laws of any kind to regulate the practice of medicine and surgery if osteopaths and christian science healers are to be allowed to treat the sick and injured according to their peculiar methods, which in many instances must necessarily mean that individuals will die through lack of proper attention.

The most ignorant physician who dispenses drugs or chemicals can do no more damage in the community than can the osteopaths and christian science healers, and there is no more reason for the first complying with legal requirements than there is for the osteopaths and christian science healers to be bound down by legal restrictions. We submit that if the christian scientists and osteopaths are to be allowed to treat the sick and afflicted, then any one, no matter who he may be nor what his requirements may be, should be allowed the same privilege. If human lives are to be placed in the hands of those who are not fitted by education or experience to care for them, then let us not insist upon competency in any position where human life is concerned. As one contemporary says: "If we are to have inspired healers who profess to remove pathological conditions without the use of recognized methods, then let us have inspired engineers and pilots who can run locomotives and steamboats without a knowledge of machinery." Certainly one proposition is as rational as the other.

A. E. B.

A PLEA FOR THE OPHTHALMOSCOPE.

Although ophthalmology is destined to remain within the exclusive confines of specialism, its creation as a major branch in many medical colleges has offered opportunities to the student-body which unfortunately are not always appreciated until too late. It is remarkable, but true, that many otherwise excellent physicians are not only ignorant of ordinary external ocular affections, but are absolutely unfitted to inspect this important organ as an ac-

cessory means of diagnosis. It seems almost incredible that an organ which in its structure practically represents a combination of almost all varieties of normal tissues, which permits of the inspection of exposed nerves and blood vessels in situ, and in which there arises such a variety of pathological changes, indicative of systemic affections, should be so neglected by the general practitioner. How often is the ophthalmologist consulted as the last court of appeal when some physician has been instilling a mydriatic into a glaucomatous eye, and how seldom is he approached as a first court of appeal when the detection of intraocular changes might have elicited many valuable diagnostic factors. No one, of course, should attempt to perform any operations upon the eye unless he has had considerable experience; but this does not apply to the treatment of simple corneal ulcers and uncomplicated cases of conjunctivitis, which are so frequently unintelligently treated by the family doctor. The expressions of students and even practitioners regarding their distaste for ophthalmology have their inception in several sources. In the majority of cases these dislikes are due to the fact that in the teaching of other branches of medicine, but very little attention is paid to the eye. Again the subject of "refraction" is taught to those who have preconceived intentions of forever banishing it from their consideration after they have graduated. Notwithstanding that the eye and its appendages consist of fibrous, adipose, areolar, muscular, nervous, vascular, glandular, osseous and specialized tissues, together with serous and mucous membranes, hair, skin and cartilage, it is given but an insignificant position in modern treatises on pathology. If the intelligent use of the ophthalmoscope by the general practitioner would take the place of his frequent unintelligent use of the test lenses, much would be gained in diagnosis and treatment.—*Phil. Med. Jour.*

THE STUDY OF MAN.

When Alexander Pope, with deep poetical and philosophical insight announced to the world that

'The greatest study of mankind is man'

he uttered a truth which had at that time only a desultory and impractical recognition. It is only within very recent time that any serious and reasonable attempt has been made to study the indi-

vidual man as Sir Charles Lyall studied rocks or Aggasiz the denizens of the sea. Yet it is only by means of data thus acquired that a true science of man can be constructed which is at all worth the name. One of the most remarkable applications of this method on record is that made by a number of French specialists, including Bertillon, Passy, Huchard and others in the case of the distinguished novelist and agitator, Emile Zola. This has recently been reviewed by Arthur McDonald in "The Open Court" and furnishes most interesting reading. A photograph of Zola at six years with a profile and front view at fifty-seven, his present age, the palms of both hands, the imprints of the fingers, sphygmographic tracings of pulse and respiration are the illustrations reproduced in this article. Some of the anthropometrical measurements which indicate the plans of work along these lines is herewith reproduced.

Height, 1 m. 705 m.

Sitting height, 890 m.

Arm reach, 1 m. 770 mm.

Maximum length of head, 191 m.

Maximum width of head, 156 mm.

Cephalic index, 81 mm.

Length of right ear, 69 mm.

Width of right ear, 31 mm.

Length of left foot, 262 mm.

Length of right foot, 269 mm.

Vertical diameter of head, 143 mm.

Bizygomatic diameter of head, 146 mm.

Chest girth, 1 m. 60 mm.

Waist girth, 1 m. 70 mm.

Weight, 160 pounds.

Following this is an analysis of the physical peculiarities, including the form of the hands, finger imprints, circulatory organs, respiration, digestive apparatus, muscular system, nervous system, psychophysical organization, sensation and perception, memory, attention, ideas, emotions, sentiments, morbid tendencies, etc.

As the writer aptly remarks: 'It is paradoxical that man is the last object to be thoroughly studied by man,' and it is to be sincerely hoped that studies of this kind will be carried on in such a manner as to furnish interesting and valuable data for the construction of a true and comprehensive anthropological science.

G. W. M.

THE INDIANA STATE MEDICAL SOCIETY.

As the time approaches for the annual meeting of the Indiana State Medical Society, interest in the South Bend meeting is on the increase, and we have every reason to believe that the 1901 meeting will prove equal to, or better, than any meeting in the history of the society. No meeting has had more preliminary work bestowed upon it than is being given the 1901 meeting by the local fraternity at South Bend. While a three days' session is something new, we believe that it will prove satisfactory and probably result in establishing a three days' session as a regular feature for future meetings. Another unusual feature is the special program prepared by the wives of the physicians of South Bend for the entertainment of visiting ladies, and to emphasize the fact that a large attendance of ladies is desired, the committee has sent the wife of every member of the Indiana State Medical society a special invitation, requesting attendance at this year's meeting. The program for the ladies consists in carriage drives, lawn fetes, receptions, musicals, and in fact everything that is conducive to splendid entertainment.

The preliminary program, which is before us, shows that the opening session will be called at 1:30 p. m. on Wednesday, May 15th, and that after the usual report by the officers and committees, five papers will be read at the afternoon session. The evening of the first day is to be devoted to an entertainment by the St. Joseph County Medical Society, and we are reliably informed that this will consist in a smoker, with musical features. The forenoon of the second day will be devoted to seven papers, and the afternoon to twelve papers. The evening session of the second day is of a semi-public character, and will be held at the Oliver Opera House, the program consisting of the president's address, by Dr. G. W. McCaskey, and an address upon the subject, "The Making of a Doctor," by Dr. John A. Wyeth, of New York City. This will be followed by a reception and dance at the Oliver hotel. The morning session of the third day will be devoted to ten papers, and the afternoon session to eleven papers.

Members and visitors are requested to wear the society button, which will be furnished at the Registration Bureau, and is a card of introduction to the citizens of South Bend, who stand ready to extend welcome. The street railway company will carry all members and ladies within the city limits, provided the company's special design, made for the occasion, is presented. The privileges of the

Commercial Club and of the Indiana Club are extended to the members and ladies during the convention.

The scientific program is an interesting one, and the social features will be in keeping with the well known enterprise and hospitality of the South Bend medical fraternity. We urge upon our friends to arrange to attend this meeting, and feel warranted in guaranteeing in advance a pleasant and profitable time.

The officers of the society are: President, Dr. G. W. McCaskey, Fort Wayne; First Vice-President, Dr. A. M. Hayden, Evansville; Secretary, Dr. F. C. Heath, Indianapolis; Assistant Secretary, Dr. J. B. Berteling, South Bend; Treasurer, Dr. Albert E. Bulson, Jr., Fort Wayne.

The committee on arrangements, the members of which all live in South Bend, are: Drs. J. B. Berteling, H. T. Montgomery, A. Daugherty, C. Stoltz and C. C. Terry.

The reception committee from the St. Joseph County Medical Society is composed of Drs. E. P. Eastman, G. W. Van Benschoten, C. M. Butterworth and H. F. Mitchell, all of South Bend.

NEWS NOTES AND COMMENTS

VACCINATED BURGLAR AND THE DETECTIVES.—A burglar walked into a quarantined apartment house in New York City last week. There had been some smallpox in the building and two Board of Health doctors were in charge of the house. They found the burglar at work, and before turning him over to the authorities they vaccinated him. When three detectives arrived at the house the Board of Health doctors would not let them out of the building until they submitted to vaccination.—*Phil. Med. Jour.*

A NEW MEDICAL JOURNAL.—The J. F. Hartz Company, dealers in surgical instruments at Detroit, Mich., have decided to engage in the medical publishing business, and have announced the appearance of the *Detroit Medical Journal*, the time to be April 15th. The initial edition is to be 12,000 copies, and the publication will be wholly independent in policy and character, and devoted solely to the interests of the medical profession. The editorial management will be in the hands of Dr. G. A. Stockwell.

CONTAGIOUS DISEASE HOSPITAL.—A dispatch from Lansing, Mich., under date of December 29, says: "Attorney-General Oren has, in an official opinion, declared that townships must erect contagious disease hospitals. Attorney Orin says that it is the intention of the legislature that each township should establish its own hospital for communicable diseases. Secretary Baker, of the State Board of Health, will soon advise the township officers of this provision in the law, and recommend its immediate enforcement.—*Phil. Med. Jour.*

THE WOODBRIDGE TREATMENT OF TYPHOID FEVER.—An opportunity of testing his method of treating typhoid fever was given Dr. Woodbridge at Chicago, and a recent number of the *Chicago Medical Recorder*, in commenting upon the results secured by Dr. Woodbridge at the Fort Meyer hospital, says that he had a mortality of 10 per cent. as contrasted with a mortality of 7 per cent. by usual methods. The usual run of cases were selected for the Woodbridge treatment, and every opportunity given for a fair and thorough test, but the results seem to prove that Dr. Woodbridge's treatment is not superior to usual methods.

PLACENTA PREVIA STATISTICS.—The following letter has been received and is self explanatory:

TOLEDO, O., April 2d, 1901.

DEAR DOCTOR:

Inasmuch as the statistics now at hand with reference to placenta previa and its treatment, are believed to be inaccurate, I desire to gather together statistics which can be relied upon; and for this purpose I am sending blanks to a number of the leading physicians and maternity institutions of the U. S., trusting they will be sufficiently interested in this subject to at once fill them in and return.

I have taken the liberty of sending one to you.

Yours very truly,

WM. J. GILLETTE, M. D.

ARGONIN IN THE TREATMENT OF GONORRHEA.—In a paper in a recent number of the *Philadelphia Medical Journal*, Dr. F. Cabot, Jr., says that in the treatment of acute anterior gonorrhea we should

devote our efforts to the avoidance of complications and to the rapid elimination of the gonococcus, aiming in this way to shorten the course of the disease.

He has, during the past four years, used several preparations of the silver salts which have been found to be much more satisfactory and less irritating than silver nitrate; in fact he believes some of them to be of much more value than other antiseptics in the treatment of the earliest stage of gonorrhea. Of the four remedies, argonin, portargol, argentum and largin, he finds that the former is preferable from every point of view in the treatment of gonorrhea. The argonin is used in from 10 to 30 per cent. solutions, and when fresh and injected into the urethra hot (110 to 120 F) he finds that the results are more satisfactory than by treatment with any other method. The results secured are usually permanent, there being no return later from deep lesions produced by the treatment or complications.

THREE MICROORGANISMS OTHER THAN KLEBS-LOFFLER, WHICH PRODUCE MEMBRANOUS ANGINA.—Bissel (*Buffalo Medical Journal*, December, 1900), says the Bureau of Bacteriology in the city of Buffalo, has observed that streptococcus pyogenes, and the micrococcus of sputum septicemia, which belong to the bacteria, and odidium albicans, which belong to the group of fungi, are each capable of producing a pseudomembranous inflammation which macroscopically cannot be differentiated from that produced by the Klebs-Löffler bacillus. So far as observed in that city the oidium albicans has never caused a fatal angina; but at least one death has been caused by each of the other germs named, in both of which cases the antitoxin of diphtheria was used without appreciable effect. Several deaths from the streptococcus pyogenes have been reported in New York City, in which nothing but a bacteriological examination could distinguish the infection from a true diphtheria. The author draws the following conclusions: 1. Streptococcus pyogenes and the micrococcus of sputum septicemia can produce membranous anginas, accompanied by physical disturbances sufficient to result in death. 2. Oidium albicans produces pseudomembranous exudates easily mistaken for the Klebs-Löffler inflammation. 3. The only positive means of determining a Klebs-Löffler infection is by microscopic methods. 4. From the sanitary standpoint, as regards quarantine, anginas due to Strepto-

coccus pyogenes, micrococcus of sputum septicemia and *Oidium albicans* require little consideration.—*Phil. Med. Jour.*

CHRISTIAN SCIENCE.—The following story is told in the *Southern Practitioner*:

The husband of a Christian Scientist teacher, lately married, that did not believe in doctors or sickness, called upon a physician one cold, stormy night in January. He was in a great hurry.

"What is the matter?" asked the doctor, sticking his night-cap out of the door.

"Oh," said the man, in an anxious tone, "my wife is very sick, and wants you to come at once."

"She sick?" answered the doctor in surprise; "why, man, she has turned half this town into the belief that there is no such thing as pain."

"But it's different now," replied the man. "We're—that is, you know—well, she's going, or rather, she expects—we've been calculating for some time to have a—bab—yes, a chil—a boy or a girl. It's—it will, or would be our first, and we thought you'd better be around."

"Well, my dear man," said the doctor, "tell your wife that I am sorry she has so far forgotten her calling as to give in to the sin of a fancied pain or two. These twinges that come with such clock-like regularity are nothing but the timed temptations of Satan. Tell her that there is no such thing as pain; that she isn't going to have a baby; that she isn't a woman, but the ghost of Euripides; that she isn't married. Tell her that I am not a doctor, and never was, and that this is one of the loveliest nights in June. Good-night, sir."—*Regular Med. Visitor, Mich.*, 1901.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

HAEMATEMESIS IN INTESTINAL STENOSIS.—L. Atixier and C. Viannay, (*Gazette hebdom. de Med. et de Chir.*, 1900, No. 77), direct attention to the rarity with which haematemesis has been mentioned as a symptom of stenosis of the intestine; it is not commonly discussed among the causes of gastric hemorrhage. It is, nevertheless, not surprising that it does occasionally occur. In the case reported by the authors the patient was admitted with the signs of severe intestinal stenosis, which laparotomy showed to be due to adhesions in the ileocecal region. These were overcome as far as possible and the patient improved temporarily, but after a few hours began to vomit again, the vomitus was black, had no fecal odor, and gave the characteristic reactions of blood. The patient died the next day after having vomited certainly as much as 2 litres of this black material within twenty-four hours. The stenosis was found to be about 50 cm. from the ileocaecal valve, the intestine being fixed by adhesions and almost completely stenosed. Masses resembling the vomitus were found in the upper portion of the small intestine, while normal feces were found in the lower part. In the upper part of the small intestine there was severe congestion and there was a hemorrhage suffusion at the point of stricture. The occurrence of the hemorrhage was explained chiefly by the blood stasis produced by the stricture, which had caused an intense congestion of the intestinal mucus membrane; the authors also consider that the irritation of the peritoneum had caused severe vasomotor disturbance, and that the toxic and inflammatory changes present had caused alteration of the vessel walls and of the blood. There was no sign of ulceration in this case,

and the authors direct attention to the fact that hemorrhage has been seen in a number of similar cases in which no change was found in the intestine which directly localized the source of the hemorrhage. Hemorrhage in such cases makes the prognosis extremely bad. It indicates severe lesions as a result of the occlusion.—*Amer. Jour. Med. Sciences.*

PURE UREA IN THE TREATMENT OF TUBERCULOSIS.—Harper (*Lancet*, *Phil. Med. Jour.*) advocates the use of pure urea in the treatment of tuberculosis, and believes the remedy to be superior to any other that is in use for this disease at the present time. The author's experience leads him to believe that more radical measures will be needed in the treatment of this disease than fresh air and the ordinary sanitarium, and that a careful revision of our diet list will form the keynote in the management of tuberculosis. Over one-half of his own cases of tuberculosis come from the country; therefore, it is hard to coincide with the view that country air is the remedy for tuberculosis. He has urged tuberculous patients to partake of as much animal food as possible. The immunity of certain animals to tuberculosis may be ascribed to the character of their food, and in the author's opinion, urea and uric acid play an important part in rendering animals immune, or the reverse. The carnivora rarely become tuberculous, whilst the herbivora show a marked tendency to tuberculosis. The author finds upon reviewing his notes of cases, that those individuals showing a marked tendency to gout, gravel and calculus very rarely suffer from tuberculosis. The negro, although leading an outdoor life, is especially liable to tuberculosis, probably for the reason that his food largely consists of starchy foods, such as rice, vegetables and fruits, and partakes sparingly of meat. The author applied the following treatment in his own cases: Plenty of nutritious food, especially that rich in albumins (1 kidney well cooked, daily, with one-half pint of beef tea); in carefully selected cases, he advised exercise in the fresh air. The medicinal treatment comprised drugs of recognized value, such as iron, cod-liver oil, hydrochloric acid, strychnia, pepsin, and creosote, and urea has been added to the remedies mentioned. By partaking of a superabundance of rich food, containing a large percentage of urea, the tissues and fluids of the body are rendered less susceptible to the invasion of the tubercle-bacilli, in short they act as an antitoxin. A report of nine cases of tuberculosis is given.

In all of these urea was administered with very favorable results. The remedy is of special value when the disease is uncomplicated by various species of cocci. From the standpoint of a laboratory investigation, the author failed to obtain a growth of tubercle-bacilli in meat broth containing a small percentage of urea, whilst in the control tubes which did not contain urea the bacilli grew.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

REMOVAL OF POWDER STAINS.—Dr. J. Weely Rhoades, of Philadelphia, recommends (*American Medicine*, April 6) the use of hydrogen dioxide for the removal of powder stains. It is to be applied frequently in full strength.

EARLY OPERATION IN PERFORATING TYPHOID ULCER.—Osler (*Lancet*, Feb. 9), says 25 per cent of the deaths in typhoid are due to perforation of intestines. He believes that from 30 per cent. to 40 per cent. of these cases can be saved by early operation. In doubtful cases he would give the patient the benefit of the doubt. Of 11 cases operated since January 1, 1900, in Johns Hopkins hospital, 5 recovered.

THE DEATH RATE IN SPINAL COCAINIZATION.—Reclus in his address to the Paris Academie de Medicine, March 19, (*Jour. Amr. Med. Asso.*, April 13, 1901), says that there has been six fatalities in less than 2,000 applications of spinal cocainizations in Europe.

Certainly such a record as this does not warrant the use of this method of producing anesthesia save in very rare cases, in which the use of ether or chloroform would be unusually hazardous.

BLOOD CHANGES IN SHOCK.—Turck, of Chicago, (*Phil. Med. Jour.*, March 30, 1901) has performed some experiments which

seem to prove that shock produces decided changes in the blood. By injecting healthy animals (dogs, rabbits, guineapigs) with blood from dogs suffering from shock he produced weakness, convulsions and death. He says also that these injections seem to render animals subjected to them more susceptible to infection. Further experiments along this line are needed, and give promise of developing facts of much practical importance.

THE PREVENTION OF NAUSEA AND VOMITING DURING AND AFTER ANESTHESIA.—Hirschman (*N. Y. Med. Jour.*, Dec. 15, 1900) recommends that 10 grains of chlorotine be given a half-hour before anesthesia is begun to prevent nausea and vomiting. He says patients to whom it is given require less anesthetic, are more tranquil, and less likely to require stimulation during anesthesia. He used it in thirty cases, none were nauseated during anesthesia and only three after to slight extent. Eighty per cent. of those not receiving the drug had nausea and vomiting after operation.

THE PELVIC BINDER.—Like many another article the pelvic binder has been subjected to faddism. Once regarded as an essential part of midwifery technique it suddenly became a superfluity and then it was said to push the uterus up beneath the diaphragm and cause all sorts of trouble. Conservatism has, however, brought it again into use and with it the perineal band. When properly applied it holds in proper position the visceral and pelvic contents, assisting in the repair of lacerated tissues, in the involution of the uterus, the prevention of congestion, and not only gives comfort to the woman, but preserves her figure. The diligent accoucheur should now provide several such binders for use during the first two weeks of the puerperium when they may be replaced by the usual abdominal binder.—*Physician and Surgeon*, October, 1900.

REPEATED CAESARIAN SECTION IN SAME WOMAN.—We are told by the *Am. Jour. of Surg. and Gynecol.*, that "within a period of six and one-half years Dr. J. W. Cookley, of Mt. Etna, Iowa, has performed Cæsarian section three times upon the same woman. A report of the operations appear in the last issue of *Medical Brief*. It speaks volumes in favor of this procedure as an operation of

selection. A few such favorable results, properly called to the attention of medical men everywhere, should lead to the total disappearance of craniotomy upon the living child—an operation now universally condemned by every surgeon of note. Cæsarian section is just as safe for mother; and saves the child.”

(It seems to us that good sense and good surgery, to say nothing of human kindness, would have prompted the operator in this case to remove the tubes, the uterus, or both at the first operation and thus render future pregnancies impossible.)—Ed.

ABDOMINAL DISTENTION A SIGN OF ABSCESS IN DOUGLAS'S POUCH.—In a paper (*Am. Jour. Surg. and Gynecal*, March) on epityphlitic abscess Bernays says:

“I believe the most reliable sign of Douglas abscess is the appearance of abdominal distention early in an attack of appendicitis. This point is the one which I regard as being of the greatest practical importance and I particularly desire to ask of you to look out for this diagnostic guide in your future experience. I believe it is very necessary to be aware of the existence of these abscesses, because if recognized they are easily treated and brought to a favorable termination.

Distension of the abdomen has too frequently been taken to mean general or diffuse peritonitis and has been treated as such. The distension was in reality caused by the compression of only a limited and short piece of the intestine, perhaps only the rectum or a loop of the sigmoid flexure. There are cases in which iliac abscesses will cause a compression and occlusion of the last loop of the ilium which will produce a distention of the abdomen. An examination of the cul-de-sac by means of the finger in the rectum will immediately clear up this point. In the absence of a Douglas's abscess, the wise surgeon will under these conditions, immediately resort to the iliac incision and he will find the cause such a position that a loop of the ileum is so adherent to the omentum, cecum or the brim of the pelvis that it has caused a part of the ileum to become impassable for gas or feces. The evacuation of the abscess and the removal of the diseased appendix, followed by a loosely packed gauze drain, will be followed by relief of all the dangerous symptoms in nearly all cases. I have had a few cases in which a tight gauze pack created an obstruction as bad in its effect as the abscess

itself had been, and I only call attention to this condition in order to show that considerable circumspection is necessary in dealing with these very common conditions."

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, and the Allen County Orphan Asylum
Professor of Laryngology and Rhinology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

DELAYED CORNEAL UNION FOLLOWING CATARACT EXTRACTION.

--Dr. De Schweinitz at a recent meeting of the Society of the College of the Physicians of Philadelphia, described a case of normal combined cataract extraction in which the anterior chamber was not reformed until the 32nd day. The slow closure was attributed to failure of reparative power, due to the mental condition of the patient which was greatly depressed.

GONORRHEAL OPHTHALMIA WITH COMPLICATIONS.—Dr. A. E. Bulson, in the April *Ophthalmic Record*, reports four cases of gonorrheal ophthalmitis in the adult, with complications, from which he draws the following conclusions:

Given a case of gonorrheal ophthalmitis, the diagnosis of which has been verified by microscopical examination of the secretion, the first thing to be done, if the oedema of the lids is marked, is to divide the outer canthus for the purpose of facilitating cleansing and to prevent any possible pressure upon the cornea. The next step is thorough flushing with antiseptic solutions to keep the parts free from infective material, and he makes the point that flushings as ordinarily performed are not sufficiently thorough nor frequent, and he therefore insists upon having a competent nurse wash the infected eye every fifteen minutes, in order to keep the eye free from purulent discharges, which accumulate with striking rapidity. The nurses are especially cautioned not to touch the cornea with anything for fear of producing an abrasion, and thus making it possi-

ble for the introduction of infection. If panophthalmitis has set in, evisceration is always preferred to enucleation, and while he has not hesitated to enucleate an eye effected by panophthalmitis some unfortunate experiences have led him to condemn such a procedure as wholly unjustified and attended with unnecessary risk.

THE TREATMENT OF DETACHMENT OF THE RETINA.—Dr. Casey A. Wood, of Chicago, in the April *Ophthalmic Record*, says that Starkle, in his (Basel) Inaugural Thesis, gives an account of the treatment of twenty-three comparatively recent cases of the disease by subconjunctival injections of salt solution. In ten cases there was a marked improvement, with complete restoration of the detached membrane in three. In nearly all (21) improvement of vision set in; in seventeen there was enlargement of the field of vision. As might have been expected, the more recent the detachment the more marked was the improvement. The operator began usually with a weak (2 per cent.) solution, but finally employed a four and even a ten per cent. solution. In many instances the last strength seemed the most effective. The author thinks that the exosmosis and endosmosis set up by the salt solution reduces the amount of the subretinal fluid without decreasing the vitreous mass, thus permitting the retina to resume its normal position.

There is, at least, one consideration not to be lost sight of in this connection. In choosing a form of treatment for detachment of the retina, this plan has the advantage of being without risk—which cannot be claimed for procedures like the Schoeler and Deutschmann methods.

BOOK REVIEWS.

INEBRIETY, ITS SOURCE, PREVENTION AND CURE.—By Chas. Follen Palmer. Fleming H. Revell Co. New York, Chicago, Toronto. 1897.

This little brochurer of about one hundred pages presents a very readable study of the subject of inebriety from the neuro-psychological point of view. It lays especial stress upon what the author terms 'nervous mental organization' and discusses at some length the so-called inebriate diathesis. Proper stress is laid upon trained will power as an essential factor in the prevention and cure of inebriety. The volume closes with an interesting diagram in which is outlined the normal conditions of nervous and mental life and the various departures from these both in the direction of depression and exaltation. It will repay a careful perusal on the part of those interested in the subject.

G. M. W.

A PRIMER OF PSYCHOLOGY AND MENTAL DISEASE.—For use in the training schools for the attendants and nurses and in Medical Classes by C. B. Burr, M. D., Medical Director of Oak Grove Hospital for Nervous and Mental Diseases, Flint, Mich., Formerly Superintendent of the Eastern Michigan Asylum; Member of the American Medico-Psychological Association, etc. Second Edition thoroughly revised. The F. A. Davis Co., Philadelphia, New York, Chicago, 1898.

The object of this volume is to furnish for students and for attendants and nurses in training schools an elementary review of the fundamental facts in connection with psychology and mental diseases. It is admirably adapted to fulfill its avowed purpose and is highly commended to the class of readers for which it is intended.

G. W. M.

BRAIN IN RELATION TO MIND.—By J. Sanderson Christison, M. D., Author of "Crime and Criminals," etc; formerly of the

New York Asylums for the Insane, etc. Chicago. 1899.

The author opens this very inviting discussion by stating the three principal doctrines of the brain in relation to the mind as given by Dr. J. Hughlings Jackson as follows:

First—"That activities of the highest centers and mental states are one and the same thing, or different sides of the same thing. This doctrine has been destroyed."

Second—"That mind acts through the nervous system (through the highest centers first); here an immaterial agency is supposed to produce physical effects."

Third—" (a) States of consciousness (synonymously states of mind) are utterly different from nervous states of the highest centers; (b) the two things occur together, for every mental state there being a correlative nervous state; (c) although the two things occur in parallelism, there is no interference the one with the other. Hence we do not say that psychical states are functions of the brain, but simply that they occur during the functioning of the brain." The author then proceeds to give a brief description of brain cells and the anatomical relations, discusses the theory of mind localization and says among other things that the trend of opinion recently favors the posterior lobes of the brain as being the ones chiefly involved in the higher mental processes. This view of cerebrophysiology will need a great deal of backing, much more than it has as yet received, before it will meet with gradual acceptance for reasons which cannot here be entered into. The size of the brain in relation to mental processes is discussed at more length and there is a chapter upon what the author calls the normal mind by which he means "the prompt and co-ordinate action of all the mental faculties co-existing with pacific disposition of temper." The author does not mean by this to define the human intellect, but simply to indicate a state which enables the individual to do his best mentally under any given condition.

While not materially perhaps advancing the boundaries of knowledge it is an interesting and suggestive little brochure.

G. W. M.

A TREATISE ON MENTAL DISEASES.—Based upon the lecture course at the Johns Hopkins University, 1899, and designed for the use of practitioners and students of medicine. By Henry J.

Berkley, M. D. Clinical Professor of psychiatry, the Johns Hopkins University, Chief Visiting Physician to the City Insane Asylum Baltimore. With Frontispiece, Lithographic plates, and illustrations in the text. D. Appleton & Co, New York, 1900.

This volume, like nearly everything else emanating from the Johns Hopkins University, is fully entitled to the careful attention of the medical profession. The somatic bases of mental disorders receive a great deal of attention and especially the cell alterations and vascular changes found under varying conditions. As an illustration of the point of view and scope of the work the importance of brain cell degeneration from overstrain is discussed at some length with especial reference to the results of Bevan Lewis, Batty Tuke, Hodge Gehuchten and Marinesco.

The author exemplifies the recent tendencies in psychiatric study to indicate the practical identity of the acute mental disturbances associated with infections and other acute indications and those to which the term insanity is commonly applied. He says "The condition of motor unrest, of hallucinations and delusions of the brain obtunded by fever and a systemic poison, we call delirium when it lasts only as long as does the febrile movement; we term it insanity when it persists after the indications of the somatic disease have disappeared." He discusses the autogenic intoxications at considerable length, including autointoxication of intestinal origin, cholaemia, gout, etc., all of which are well recognized causes of common types of insanity.

The volume is elaborately illustrated, including several colored plates and its mechanical execution is up to the standard of its subject matter which is high praise. The volume will form a welcome addition to the literature of this important subject and should be upon the shelves of every practitioner who expects to have to deal with this class of cases.

G. W. M.

FORT WAYNE MEDICAL JOURNAL-MAGAZINE.

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No. 5.

ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

TETANUS.

By G. W. THOMPSON, M. D.,
Winimac, Ind.

MR. PRESIDENT AND GENTLEMEN:

The subject of my paper is by no means new, as tetanus has been known to exist since the creation of man, and has baffled the skill of the best physicians and surgeons throughout the world in every age; indeed, it has been considered one of the most fatal diseases that man or beast is heir to. There has been almost as great, if not a greater per cent of mortality resulting from this in proportion to the number of persons afflicted with it than from any other disease known to mankind, except it be hydrophobia or trichina. Its horrors can only be realized by those who have seen cases of it, and witnessed it in all its intensity. It is truly a heart rending task to the physician who is so unfortunate as to have a case to treat.

I speak thus from experience, having had cases to treat in my own practice. For centuries and centuries all that could be expected from any kind of treatment was to give the patient tem-

Read at the Annual Meeting of the Marshall County Medical Society,
Plymouth, Ind., April 11, 1901.

porary relief by the use of anaesthetics or any kind of remedial agents that would modify the symptoms and give the patient relief, or in any way tend to overcome the tortuous muscular spasms which is one of the early symptoms in all cases of tetanus, and at the same time make death as easy as possible for the poor unfortunate sufferer, without any hope whatever of being able to remove the cause or cure the disease.

In the entire range of surgical diseases there are none, perhaps, where there has been so little accomplished with treatment as in this disease. Until quite recently its cause was a hidden mystery and its pathology but little understood. In recent years, however, the advance steps taken by scientists to ascertain the true pathological conditions on the subject of its etiology has furnished more information to the profession than has ever been known before. No one doubts now that the infection is caused by a bacillus; that it finds its way into the system through some kind of traumatism being inflicted on the person who is a victim.

That tetanus ever exists from idiopathic causes, or other than traumatic injuries, none believe who are up to date in pathological learning, notwithstanding the fact that idiopathic tetanus has been taught since the disease was first known, by every author who has attempted to write on the subject, until a very few years ago.

Since Nicolaer made the discovery in 1885 of the bacillus that causes the disease, all the authors who have written on the subject since that time have declared it to be an infectious disease; that the infection can only gain entrance into the system from traumatic injuries, and if the disease is one of tetanic origin, that its origin must be a wound, though it may be so small as to escape notice; or perhaps it may be a traumatism within the alimentary canal, and thus hidden from observation. Punctured or lacerated wounds are more likely to cause an attack than clean cut or incised wounds; also wounds of that character inflicted on the feet or hands are more liable to cause an attack than wounds elsewhere on the body. From the very nature of punctured and lacerated wounds it is easy to determine why they are more likely to cause the disease.

In the first place they are more painful than clean cut wounds, and do not bleed so readily, nor offer such favorable opportunity for successful drainage, and are as a rule deeper, thereby introducing the infectious matter deeper into the tissues with but little chance for escape, and especially if the wound is allowed to go days

before cleansing and being made aseptic. The spasm seldom occurs before the wound which causes it begins to slough; many instances are on record, however, where the attack came on after the wound had been healed.

Every careful and painstaking surgeon will see to it, when an injured person applies to him for treatment, that the wound receives the most careful attention at his hands, it matters not how trivial or insignificant it may be. If a punctured wound, it should be incised as deep as the puncture, and the wound made purely aseptic; if lacerated, it should be curetted and transformed into an incised wound by trimming out all torn or lacerated tissue, with all ragged edges carefully trimmed and pockets opened freely and made aseptic.

The bacilli of tetanus are similar to those of hydrophobia. They appear very much alike in their action, and it is thought by many who have studied the subject carefully and made microscopical examinations that they are the same in most respects. Rosenbaugh describes the bacillus tetani as "anaerobic microorganism presenting a bristly appearance, with a spore at one of its extremities, giving it the appearance of a drum stick."

These bacilli will produce spores in thirty hours in cultures kept at a temperature of natural body heat, but are readily destroyed by placing them in a sterilizer heated to 100 degrees centigrade for a period of five minutes, according to recent observations of Breiger and Rosenbaugh.

Different kinds of surface soil is productive of these bacilli; they are found in abundance in street dust, barn yards and stables.

Breiger, who has perhaps labored harder than any other living scientist in studying the minutia of these bacilli, has demonstrated beyond a doubt that the toxins of the bacillus of tetanus cause convulsions. He has also clearly demonstrated that tetanus in animals can be produced artificially by injection of wound secretions of tetanic patients, or by using mixed or pure cultures. These proofs have established the fact that the disease is of microbic origin; that the essential cause of it is the bacillus, first described by Nicolaer; that these germs are to be found in earth, fertilizer, cesspools, and also in the secretions of wounds of tetanic patients.

The time of development, or the incubation stage in man, is variable and quite uncertain. In some cases it may not require more than twenty-four hours, while in other cases it may require

weeks from the time of the infection until the disease manifests itself. The uncertainty of the development may be influenced by the number of the bacilli in the wound. The number may be so small as to require a longer time for them to develop into active symptoms, and, again, the location of the point of infection may influence the time required to bring on an attack. It is altogether likely that active symptoms of tetanus in man are not due to the presense in the tissues of the bacillus, but to the toxic action of the ptomains on the spinal cord. I believe that both the acute and chronic forms of tetanus are due to the same kind of microbes, and that these microbes can be transferred from animals to man, and vice versa; furthermore, that climatic influence has much to do in the way of influencing the disease—the warmer climates being particularly favorable to it.

According to statistical reports it would seem that the colored races are more susceptible to it than the caucasian race. This may be influenced in some degree by climatic conditions, as a very large majority of the colored races live in tropical climates. It also appears according to the history of the disease that the warmer climates are more favorable to it than colder climates; however, those who live in the extreme cold climates are by no means exempt from the disease.

Since being engaged in the practice of medicine I have been called upon to treat three cases, one case in consultation and two patients of my own. This covers a period of twenty-nine years, so it would represent about one case in each ten years of practice. The first case was a young married lady, twenty-two years of age. She and her husband were making a trip to the country in a buggy. Before starting the husband loaded his gun with a heavy load of buck shot. On the way they saw some ducks near by the road where they were traveling, and he stopped the team and got out of the buggy hastily. In attempting to remove his gun from beneath the buggy seat it was discharged, the whole charge from one barrel passing through the young wife's ankle, mangling the joint in a horrible manner. The external malleolus and lower end of the fibula were shot away; the astragulous and a part of the lower end of the tibia were destroyed. She was hastily driven to her father's house and a physician sent for. The doctor dressed the wound as best he could, hoping no doubt to save the limb, but

he failed in his efforts, and by the eleventh day from the day of the accident the foot and leg became gangrenous. I saw the patient on the eleventh day, and amputated the leg four inches below the knee, being assisted in the operation by Drs. McCandlass of Medaryville, and W. H. Thompson of Winamac.

The patient did well for ten days, the temperature never going above 100 degrees, and to all appearances the wound was perfectly healthful. On the tenth day after the operation the husband removed his wife a distance of ten miles on a spring wagon through the country to his father's home. This was done without my permission, and three days later she died. All the remedies were used in this case to control it that were commonly made use of in such cases, but to no effect; the patient died from all the horrible symptoms that are met with in such cases. This was a typical case of tetanus resulting from a traumatism or gun shot wound.

Case second was a Polander, male, aged about forty-five years. In the winter of 1895 he was loading his gun preparatory to going out hunting. By some accident after he had loaded the gun with a heavy charge of bird shot the gun was discharged, the entire load passing into the foot just below the instep in the metatarsal region, leaving the greater part of the shot and wad in the wound. The opening made by the load in the foot was one and one-half inches in diameter and was a very ragged ugly wound, the flesh and bones being badly lacerated. This was a patient of Dr. W. A. Noland of North Judson, who called me to assist him. The doctor was not called until the sixth day; I was called to assist him on the seventh day after the injury was received. On my arrival I found the patient suffering from all the agony of tetanus. The jaws were tightly closed, the muscles of the neck and face rigid and the spinal muscles drawn, and opisthotonus pronounced. We anaesthetized the patient with chloroform, and removed all the spicula of bone, shot, wad and lacerated tissue from the wound, flushing the wound with a solution of bi-chloride of mercury 1 to 5,000, and after cleansing thoroughly packed it with iodoform gauze and prescribed hydrate of chloral and bromide of potassa in large doses to be taken every two hours, or oftener if the symptoms grew more alarming; also quinine and digitalis were given. On the second day after we operated the patient died.

Case third was a girl, aged fourteen years and living one mile

from Winamac. One year ago last September she was assisting her father in mowing away hay in the barn. Her left hand was caught in some way by the rope and pulley they were using, resulting in a badly lacerated wound to the palm of the left hand and middle finger, the flesh being torn from the dorsum of the finger and the bone left almost bare. The wound was dressed and the patient treated by one of the physicians of our town. On the seventh day after the injury was received symptoms of acute tetanus developed, and in two days she was suffering from all the symptoms of a well defined case of tetanus. The patient was treated by the family physician for eleven days from the time of the first tetanic symptoms. On the eleventh day he was discharged and I was asked to take the case. At this time she had all the bad symptoms usually found in such cases—trismus, opisthotonos, cold sweats and difficult deglutition. I gave her large doses of hydrate of chloral and bromide of potassa, also full doses of quinine and enough belladonna to stimulate capillary circulation; also gave by the hypodermic method digitalin and nitro glycerine twice per day to stimulate the heart. This treatment was continued every day, with as much nutritious food by the mouth and per rectum as it was possible to give her. She made good recovery, and at the end of five weeks was able to resume her household duties.

It will be of some interest to note that these cases were all from traumatic causes, and that the wounds producing the disease were all lacerations on the extremities, one of them being a wound on the upper and two wounds on the lower extremities. All of which go to substantiate the fact that wounds of the extremities are more likely to result in tetanus than wounds elsewhere on the body.

The serum treatment was not made use of in either of the above cases, as at the time when the first cases were treated but little, if anything, was known of such treatment; when I was called to treat the third case it could not have resulted in any good to the patient, inasmuch as the time that had elapsed from the time of the first symptom had been too long, being about eleven days.

Postmortem examinations have revealed that the microbes which cause the disease produce no special pathological changes in the spinal cord or the brain, but the minute tissue changes cause a central irritation which is manifested by certain muscular groups.

It is now an accepted theory that tetanus is an infectious dis-

ease, in which the microbic cause exerts its pathogenic action on the central nervous system. The prognosis in this disease has always been considered grave, and but little hope of recovery could be given to the patient or friends under the old regime or plan of treatment, the mortality always being as high as from 75 to 85 per cent. of the number of cases treated. Since the antitoxin or serum treatment was introduced the mortality reports are lessened in a marked degree, and it is thought by those who have had the opportunity of bringing this plan of treatment into use that the mortality may be reduced in this disease by the use of this plan of treatment in a much larger degree than has heretofore been attained.

The successful treatment of this dreadful malady is what interests physicians most, and I must say until very recently but little has been known or discovered in the way of a successful plan of treatment. But, thanks be to science, during these later years of investigation there has been brought to our knowledge some new truths, and we do not feel as we were once compelled to feel—that there is absolutely no remedy with which to combat this disease heretofore considered incurable.

A physician being called to treat a case of tetanus must first ascertain the source of infection, if possible, and if found he should cleanse the wound, and if a punctured wound incise it to the deepest point of the puncture, making the wound aseptic if possible; if a torn or ragged wound it should be made as nearly as possible an incised or a clean cut wound, and rendered aseptic. As remedial agents I know of none so valuable and that meet the indications so well as bromide of potassium and hydrate of chloral in full doses, at the same time guarding with quinine any possibility of malarial complications, looking well to supporting the system with good nutritious food, and placing the patient in a cool, dark room free from noise. But in addition to this the heart must be well supported, and for this I know of nothing that is so reliable as digitalis and nitro glycerine. If I had a case to treat now, in addition to the above I should use the serum, if it could be done within a period of three or four days from the time of the attack. It will be better, however, to make use of it during the first twenty-four hours.

In the presentation of this very interesting subject I have not

attempted to present anything new or startling—nothing which has not often been said by others in the consideration of this subject.

An interesting question which presents itself to us in the study of a disease is its true origin. Perhaps equally as interesting, and certainly more important, is the successful treatment, but paramount to both of these is the subject of prevention. With my limited experience in the study and investigation of tetanus I have not attempted to throw any new light upon its mysterious origin, nor have I helped you much upon the subject of treatment over what has been placed before the profession during the past few years; but upon the more important phase, that of prevention, I trust what has been suggested in this paper may be helpful to you in the future.

The old method of treatment having run through the entire role, time and time again, from calabar bean to bromide of potassa and hydrate of chloral, has not been successful in bringing about the results so much hoped for in the treatment of this disease.

The new treatment by antitoxin injection is as yet on trial, and I am fully persuaded that those of you who have oftenest met this old adversary on the battlefield will be slowest to accept the new treatment as a sure cure until thoroughly tested by honest and competent observers.

According to statistical reports there surely is a lessening of the mortality in this disease, as well as a marked lessening of the number of cases in proportion to the number of inhabitants. This being true can only be accounted for by our improved methods of treatment over that of former times reducing the mortality; the advance in methods of sanitation and hygiene, and the antiseptic precautions now observed, as well as the better management of wounds which can be done with the use of anaesthetics over that of former years.

Those who have had most experience with the serum-treatment claim that if used early it is successful in relieving a majority of such cases, and I have no doubt before the next decade it will be considered the only safe and reliable method of successful treatment.

MICROSCOPIC AIDS IN THE DIAGNOSIS AND TREATMENT OF PNEUMONIA.

By D. J. LORING,
Valparaiso, Ind.

One by one the great medical problems are being solved. Specific diseases, more especially those of extrinsic origin, are being rapidly differentiated clinically; their respective essential causes isolated; their etiological factors and avenues of infection discovered; their prevention and cure by rational methods formulated. Thus they are taken from the hands of the theorist and impericist and handed over to those whose duty it is to make intelligent and practical application of our store of knowledge for the benefit of mankind.



The case I am about to report, and which will form the basis of this paper, concerns all physicians equally alike; no difference whether he be a specialist or a general practitioner; it belongs to a class which either must often be called upon to deal with. I, therefore, hope it will not be understood as an effort to magnify any new theory, but that from the discussion which may follow, we may all be able to add something to our stock of information. I am already prepared to hear some one say who was equally un-

fortunate as myself—as to have no microscopic training while attending college—that they have no use for the microscope; that the whole subject is impractical, for the reason that it cannot be employed clinically; and that such methods of diagnosis and treatment as they have always employed is perfectly satisfactory and meets every demand of the occasion. I am happy, indeed, to know that they have been more fortunate than the writer; for I am often put to my wit's ends to make a correct diagnosis, to say nothing about administering the proper treatment, with all the resources which I am able to command. I love to see these physicians point to their long list of statistics and hear them say, with commendable enthusiasm, that such methods as they have always employed, based on their own observation and experience, has been eminently successful and always satisfactory. I would be the last person who would intentionally disturb their blissful equilibrium, believing as I do that if they are satisfied, and their patients are satisfied, all the rest of mankind should be satisfied. But while I might truly felicitate them, on conscious reflection and agreeable feeling, I am not quite sure I could always say as much for some of their patients.

I first saw this patient February 3d, and learned the following: Age 27, height 6 feet, weight 190 pounds, muscles strong and well developed, light skin and auburn hair, born in Wisconsin, of healthy parents, has had no sickness of note except articular rheumatism, from which he has suffered from three to four attacks a year, dating back to early recollection. Three years ago with a view of getting rid of this trouble he enlisted in the United States army, and served two years in Alaska. While there he suffered but little from this source, but on his return home, the rheumatism reappeared, and for three weeks prior to the onset of the present sickness he had passed through one of these rheumatic attacks, for which he had taken liberal doses of soda salicylate, and from this he now seemed fairly convalescent. He felt indisposed and chilly for two days before, and thought he had some fever. On the morning of the present day he had a severe chill lasting more than two hours, and when I saw him, in the afternoon, his temperature was 105 degrees, pulse 120, respiration 30, complained of severe headache and backache—in fact, he said he ached all over. On deep inspiration he felt darting pains through his chest, and he presented the general appearance of being a very sick man. He had no cough or expectora-

tion. Examination of his chest revealed no dullness anywhere, nor could I detect any abnormal sounds, either mucous or crepitant, over any part of his lungs or bronchi. I was able to detect a slight mitral lesion, with small direct murmur, but no regurgitation, which from his history I concluded was not of recent origin, but had followed some of his rheumatic attacks. His heart's action was good; gave a fair arterial tension, and maintained a good capillary circulation.

URINALYSIS—Specific gravity, 1028; no albumen, no sugar, urea 2.75 per cent chlorides a bare trace, and I might here say by the following day was entirely absent, and remained absent until he was convalescent.

BLOOD EXAMINATION—Showed 28,000 Leucocytes; Hg. 80 per cent; red cells not counted, but estimated at but little reduction; a few nucleated red cells were noted. He had already taken laxatives and his alimentary canal evacuated. The question—What was the diagnosis?

Was it a severe case of la grippe? No, for we never have leucocytosis in uncomplicated la grippe. Was it malaria? No, for the reason that his blood count would not have shown an increase of leucocytes, but more likely a reduction; besides, the malaria plasmodium was not found. There are a number of other diseases from which this might not have been so easily differentiated, but without the least physical evidence of disease of the lungs, and in the entire absence of any cough or expectoration, I made the diagnosis of pneumonia, and based it on the leucocyte count alone, together with the diminution of the chlorides in the urine, and predicted that within three days he would have bloody expectoration, and that one or both lungs would undergo consolidation. The first of these predictions was verified, but the latter was not; as at no time was I able to detect dullness over any part of the chest under which lung tissue should be found. On the second day he had some cough, but no expectoration; on the third day, and from this time on, his cough was very troublesome, and his expectoration was both profuse and bloody, and the pneumococcus was abundant. On the second day his eyes and urine showed bile stain. On the third day swelling of the right hypochondriac region was noted, and he became deeply jaundiced. This swelling increased in all directions—upward, downward, before and back—the liver dullness reached as high as the third

interspace, and the lower margin of the liver could be palpated three inches below the right costal arch. His temperature run an unusually high course throughout, ranging from 106.5, the highest point noted on the fifth day, to 103.5, the lowest point; but no day did the temperature not go as high as 105 or above, and no time did it drop lower than 103.5. Blood count was made each morning, and the highest leucocyte noted was 29,000 on the fifth day, and 26,000 the lowest. His pulse ranged from 120 to 145, and on the fifth day and morning of the sixth day, it was irregular and showed marked evidence of exhaustion. His respiration ranged from 30 to 45, and after the third day became labored, and during the fifth day and the morning of the sixth day exceedingly so; he was panting for breath, became cyanotic and I believed he would die. This disease terminated, by crisis, on the sixth day, when his temperature which had been hovering around 105 to 105.5, about noon began to fall and at 8 p. m. reached the phenominally low point of 97 degrees. From this it reacted somewhat, but did not become normal for twenty-four hours, and it never went above normal. From the third day the swelling in the region of the liver progressively increased until the crisis was past, when it began to diminish, but did not disappear for more than a week after he was convalescent. The day following the crisis the Leucocyte count fell to 8,000, and did not go up after this.

All the drugs that was given this man, was 1-16 gr. morphia with 1-400 gr. atropia, night and morning of the fourth and fifth days and morning of the sixth; in addition on the morning of the sixth day, he was given 1-60 gr. strychnia and two drop doses of tincture digitalis every three hours, and during this forenoon I think he had about two ounces of brandy. He had two doses, each, of the strychnia and digitalis. On the morning of the sixth day Dr. Carson saw this case and advised he be given nitromuriatic acid, on account of his jaundice; but as he very soon began to improve, it was not given. I believe the morphia and atropia improved his breathing, but what benefit resulted from the digitalis, strychnia and brandy, I am exceedingly doubtful.

The treatment of this case was very simple. He was placed in a well ventilated room, in charge of an intelligent nurse, who would obey instructions as well as note events. His bowels had already been evacuated and the danger of intestinal intoxication thereby avoided. He was given nitrogenous food, to the extent

of three pints of milk a day, with as much beef tea as we could get him to drink. All muscular activity was absolutely interdicted, even to the extent of not allowing him to move himself in bed. His alimentary canal was evacuated with an enema each day, always over a bed pan, and he was allowed to see no one but the physician and nurse. He was given all the water we could get him to drink, and this was estimated at from one to one and one-half gallons a day. He was sponged with cold water as much of the time as it felt agreeable, and this was estimated at, probably, nearly one-half of the time.

There are two things in connection with this treatment which I desire to emphasize; one, the absolute interdiction of all muscular activity—the best we can do to conserve energy—and the other, the abundance of nitrogenous food—the best heart stimulant we possess. We were exceedingly careful not to put his food to the extent of nausea, and our whole aim was to conserve every atom of energy the man possessed. I think from this description it will be readily understood that his was one of those border-line cases, and that such cases are very likely to prove fatal under any treatment.

Now there are so many things which might have been done and so many drugs which might have been given, which I believe might have easily killed this man, that I cannot forego the opportunity of calling your attention to some of them. I believe that if this man had been required to entertain the number of visitors, which would usually have intruded themselves on such a sick person; or had a number of weeping relatives been permitted to ring him up every few minutes, and required him to give each a detailed description of his condition, they might have easily killed him. Or had a few old ladies, with perfectly good intentions, been permitted—which they would have readily insisted on—of weighing his chest down with a few of their specially prepared smart-weed poultices, that the respiratory muscles, which were already laboring to the utmost of their capacity to maintain a sufficient respiration, might have resented this insult of being required to perform the additional labor of lifting this poultice from thirty to fifty times a minute, become discouraged, went on a strike, thrown up their job and quit. I can easily understand how a single dose of anti-kamia, or, probably, any of the coal tar products, by depressing his blood making organs, would have depressed him to the extent of

costing him his life. I can also understand how, had I given him digitalis from the beginning, I might have over-worked his heart muscle, and in this way brought on exhaustion and fatigue and caused his heart to stop beating before the crisis came. I think it would take no profound reasoning to see how even a mild cathartic might, in like manner, have depressed him to the point of making the balance turn the other way, or that the administration of any drug which would have disturbed his stomach to the extent of nausea or vomiting, would have resulted in like manner. If I had lessened his temperature by the aid of any drug, I would have had to do so by lessening the tissue changes, on which this temperature depended; and as we now know that if these tissue changes had not taken place, this patient could not have recovered, it would certainly require no great logic to determine that this would have been illogical.

Suppose I had given this patient arterial sedatives, say aconite, gelsem or varatrum, what would I have accomplished? Nothing but harm. The heart was working hard, it is true, but not because it wanted to, but because it had to. The tissues were poisoned, and this poison had to be eliminated, and in order that this might be done increased activity of his heart, as well as all the tissues of his body, had to take place, and had I given him any drug which would have interfered with this conservative function of these organs, these metabolic changes would have only partially taken place, and you can all see what the result would have been.

If I had given this man alcoholic stimulants from the beginning, or even pushed them later, I would have done nothing less harmful than add one toxic condition to another, and I have come to believe that this is neither judicious nor prudent. True it is that the tissues react to the toxic influence of alcohol precisely in the same manner, and for the same reason that they react to the toxic influence of the ptomain derived from the pneumococcus. Let us not be deceived by this reaction, for it has for its single purpose the getting rid of an offending toxine, and that it may do so, it must throw on the tissues an additional amount of labor to eliminate such toxic products. But some one will say that the heart's action is stronger, and the circulation is better, and the patient is certainly stimulated; to which we would again reply that we admit that the heart beats stronger, and the tissue changes are more active for a time, but this is not because they want to be, but be-

cause they have to be to get rid of an offending toxine (alcohol), and we certainly know that this additional amount of labor cannot be performed, without calling out and using up a certain amount of kinetic energy, which would be unwise in the treatment of a case like this. To those who doubt this proposition, and who really believe that alcohol is a useful and valuable drug, I would advise them to first make the experiment on themselves and note the depression which follows such intoxication. I would recommend that they empty from six to eight ounces of alcohol into their stomachs, allow this to percolate through their tissues, and filter out through other avenues. When this is done, I would ask them to measure the amount of labor their muscles are able to perform; determine the amount of food their digestive organs are able to digest; estimate the mental capacity of their brain and see if from their own experience they will not readily understand that every organ in the body is in a state of physiological depression; and how readily then will they be able to determine that alcohol is an injurious drug for a well man, and for the same reason, it is a much more injurious drug for a sick man.

I presume there is no one here who longer doubts that the pneumo-coccus was the infecting agent, and the causative factor in this man's sickness; and if it could be shown that we have a drug, which when introduced into the circulation, would either inhibit, destroy or prevent the growth or development of these germs, then I would say by all means give it, and to its full capacity, stopping short only at danger to patient's life; or if it be shown that we have a drug which will increase the resisting power of the tissues, or any part of them on which the destruction of these micro-organisms depend, then I would say give it. But until this is shown, the administration of drugs in these cases, must be considered wholly empirical, and in my opinion, the less we do of this kind of work the better it is for our patients.

But some one will ask "What are you going to do? Are you going to stand by, pull your hair, give no medicine, do nothing and let your patient die?" To such I desire to say, it is far better to do nothing than to do harm. The office of the true physician consists in neither the number nor the size of the doses he gives, but in that careful discrimination in determining as well what not to do, as what to do. This is just where I believe serious mistakes are often made. Let us not be too hasty in our conclusions, and

determine that because one patient has recovered, in spite of heroic doses of drugs, indiscriminately administered, all cases must necessarily recover by the aid of such treatment. In our efforts to steer the ship away from one rock, let us be very careful that we do not throw her, headlong, on a more dangerous one. But can we not do something? Yes, and I think we can do a great deal. We can study the life history of these germs; we can study its pathological action on the tissues; we can study the antagonisms of the tissues, on the one hand, and the micro-organisms on the other; we can make due inquiry throughout the various physiological avenues of the body, and thereby determine whether each of these organs are performing their functions to the full extent of their ability; and by this study we are able to determine, with some degree of certainty, on what part of the tissues falls the burden of waging warfare on micro-organisms, and learn how their products are eliminated. We can provide these patients with an abundance of fresh air; we can provide them with sunlight; we can provide them from being smothered under an undue amount of bed clothing; we can provide them with many little things, and in this way be able to remove many physiological embarrassments and do much to assist the tissues in their heroic efforts to destroy these germs. This I tried to accomplish in this case, by supplying this man's tissues with all the nutritious food his digestive organs could prepare and send to them. I was exceedingly careful that his digestive organs got nothing which might destroy their action. With the view that the eliminating organs might carry away as much of the leucomaine and ptomains (the result of this contest) which in this case must have been enormous, I encouraged him to drink all the water he could—which, of all diuretics, is the very best. With the view of the dissipation of heat, he was sponged with cold water, and while but little effect was produced in the way of reducing his temperature, I do believe it was conducive to a condition of quietude and rest, and did more to prevent delirium, than any drug which I might have given him.

Now this is what I call a rational treatment of pneumonia, and for that matter, most other infectious diseases. From the foregoing description, it will be readily determined that this was one of those so-called cases of central pneumonia; and by this, it is not to be understood that the etiological factor was not diplococcus

lanceolatis; and that the atrium of infection was not through the lungs; or that its pathogenic action differs from that of ordinary pneumonia; but that the probably essential difference consists, primarily, in the non-resisting influence of lung tissues to the germs.

In croupous pneumonia, as soon as the pneumococcus begins to undergo proliferation and development, the tissues at once begin to throw out an inflammatory exudate, which serves as a barrier to the further ingress of these micro-organisms, and their pathogenic effects are thus limited to the lung tissue. But in these cases, called central pneumonia, for some reason, unknown to me, this inflammatory wall is not provided, and as soon as these micro-organisms begin to produce their pathogenic influence, instead of being limited to lung tissue, by this inflammatory exudate, there is nothing to limit them, and they find their way by absorption, first into the lymphatics, thence into the general circulation where they undergo rapid proliferation and development, and are now ready to produce their pathogenic influence on any organ of the body; and owing to the anatomical and physiological relations which the liver bears to other organs, it is by no means difficult to understand how this organ might have to bear the greatest burden, and thus it is very easy to account for the enormous parenchymatous inflammation of this organ, already described. If we were to name this disease from the anatomical organ most involved, we would certainly call it parenchymatous inflammation of the liver, as the liver lesion so far overshadowed the lung lesion, as to make the latter almost insignificant; but it is better to designate the name more from the infecting agent, and as infection from the diplococcus lanceolatis is called pneumonia, while incorrect, it had better be retained until our whole nomenclature (of which we are now in so much need) undergoes complete revision along scientific lines. If then it be undisputed that the pneumococcus was the etiological factor in this man's sickness, and granted, as we now believe, that these germs are living masses of protoplasm; that they possess the same attributes of other vegetable cells; that they have a certain life history; that they, like cells in general, are capable of reproduction; that their life and multiplication depends upon the food they receive, and the environments of their surroundings; and that their food and environments were abundantly supplied by the tissues of this man's body; that in the development of these germs, a product or ptomain was set free; and that this ptomain is toxic to cells

and was the cause of the remarkable disturbance which produced this man's sickness. If these conclusions be now accepted, which seem beyond any reasonable doubt true, we would reason that through some depressing or non-resisting influence these germs found in this man's lungs a favorable site for development; that when this process was once inaugurated, rapid proliferation began and continued until the crisis came. From this reasoning we can conclude, that on the first day there were but few germs present; that on the second day these few had grown to many; that on the third and fourth days they had increased to many hundred millions, and that just prior to the crisis, he had many more germs than at any previous time. From this it would be fair to presume that they would go on, without interruption so far as the germs were concerned, until their food products were exhausted, or their environments were entirely changed. If this reasoning be true, then the question would naturally arise, how in the name of common sense did this man ever get well? No one would certainly claim that the drugs that he took had anything to do with his recovery.

This question may already, now, be answered, and it may remain for future investigation to answer it. On one thing I believe we are all agreed, and that is, that on the sixth day, when his temperature was up to 105, or above, there were rapid and destructive changes going on; when his breathing had become more and more labored, and his heart's action showed marked evidence of exhaustion, he was in a most critical condition, which must necessarily have proved fatal had it continued much longer. All at once, we note a remarkable change; his temperature began to fall, and in eight hours his body had lost eight and one-half (8 1-2) degrees of heat. The tissue changes, which had heretofore been most active, now passed into a quiet rest and his breathing became steadier and easier. His heart's action, which heretofore had been erratic, now lost all this character; it had won its share of the battle and there was but little left for it to do; hence it dropped down to the performance of only sufficient labor to barely maintain the required circulation to support life. The urine, which heretofore had been heavily loaded with bile, now soon began to show evidence of clearing up. The sputum, which up to this time contained the pneumococcus in swarms, was entirely free from them. In other words, this man passed from one of the most dangerous conditions, (due to being poisoned with pneumococcus) in the short space of

eight hours, to a perfectly well man, over and over again. Now, what was this change? What brought it about? Where did it take place? When these questions are satisfactorily answered, I will tell you how this man got well.

This remarkable phenomenon must be related to one of two things: Either the micro-organisms themselves, or the tissues (or some part of the tissues) of this man's body; it was, certainly, one or the other, for so far as we know nothing of an extrinsic nature had entered his body that could, by any possible means, bring about such a radical change in so short a time.

From what we know of the history of these germs, outside of the body, we have no reason to suppose that this change related to the micro-organisms themselves, for neither had their food product been exhausted nor their environment changed. We are, therefore, forced to the conclusion that this change related to the tissue of this man's body alone. Many explanations have been given for this change, but only two have been entitled to any credit. One of these is that the tissue, having for a certain length of time been subjected to the toxic influence of these ptomaine, proceeded to the manufacture of an anti-toxine, which being stored up in the somatic cells, or the serum of the blood, has the power of not only neutralizing the ptomaine, but also of arresting the further growth of the micro-organisms themselves; it is on this theory that we account for the immunity we enjoy growing out of a single character. It has also been the foundation for our recent serum therapy, which so far as the infection of diphtheria is concerned, I believe, has given us as much a specific for this disease, as quinine is for malaria. The other is the so-called phagocytic theory of Metschikoff, in which it is supposed that certain tissue cells, such as the epithelioid cells, or the fixed connective tissue cells, but more especially the leucocytes, or white blood corpuscles, by virtue of their ameboid movement, has the power of wandering out from the blood vessels, meandering around through connective tissue spaces and lymph channels, hunting up these micro-organisms, making warfare and eating them up, as it were, when found; thus digesting or assimilating them, or carrying them away to harmless localities where they may be eliminated and do no further harm.

Whether this theory be true or not, we do not know, but we certainly do know that if these cases are to recover, the leucocytes in the peripheral circulation must be increased; and we know, further

that there must not only be an absolute increase of the whole number found in the peripheral circulation, but there must be a relative increase of the polymorpho nuclear, or adult variety of the leucocytes. If this theory be true, why was it then that this phagocytic activity was not exerted against the micro-organisms on the first, second, third, fourth and fifth days, when the micro-organisms were less in number, and the leucocytes were as numerous in the peripheral circulation as on the sixth day, when the crisis did come? This question I cannot answer, but in support of this theory it might be argued that it requires a certain length of time to recruit an army of adult polymorpho Nuclear cells, from the lymphocyte, to be able to accomplish this work, and that this time probably corresponds to the conventional seven days which we expect a pneumonia to run. That when this army is recruited, they proceed, as with a short, sharp, quick and decisive campaign of only eight hours to annihilate the last pneumococcus in this man's body.

Whether either of these theories will stand the test of future investigation will remain to be seen, but we can be assured of one thing—that we are a people and live in a country which will be satisfied with nothing less than a complete solution of these, as yet, perplexing questions. While we do not know it all, still I believe we know more of these questions now, than at any time of the world's history, and believe we may look forward with the assurance that chemistry and physiology will settle these questions; and we must not forget that much of this knowledge will come to us through the valuable aid the microscope will give. I hope it may be understood that I would by no means oppose the administration of drugs as remedial agents, for I would not. It is only that careless, dangerous and indiscriminate administration of toxic drugs, without any regard to what they can do, or what they may do which I desire to oppose. The microscopic findings of the sputum in this case is of unusual interest for one reason only, viz. That it shows in addition to the pneumococcus, leucocytes in process of karyokinesis. In the examination of many hundred specimens of sputum I have never observed this before, nor do I know of it being described by any author, and what its pathological significance is I am unable to determine. This finding was entirely accidental, and the peculiar circumstances under which it was found may have some bearing on the fact that they have not heretofore been often found. The sample of sputum from which this specimen was taken was

stained in from three to five minutes after it was expectorated. The same sputum was again stained, and examined after it had stood in a cup at the ordinary room temperature for four hours, when none of these chromatic figures were to be found. Instead we found the same cells, or apparently so, unstained throughout, in both protoplasm and nucleus, presenting a simple halo. This evidently demonstrates that in this short time these chromosomes had undergone complete disintegration, and disappeared. Sputum is seldom stained immediately after it is expectorated, and this may account for the fact that these karokinitic figures have not heretofore been seen and described.

Another fact which appears to be of importance is that this mitosis of leucocytes was observed only about the time the crisis was inaugurated. Samples of sputum taken at 8 p. m. showed neither leucocytes in the process of cell division nor pneumococcus. It has occurred to the writer that this phenomenon, which I have here related, has something to do with that wonderful process that takes place (which we call the crisis) in pneumonia.

SOCIETY PROCEEDINGS.

THE WESTERN OPHTHALMOLOGICAL AND OTOLARYNGOLOGICAL ASSOCIATION.

The sixth annual meeting of this association was held at Cincinnati, April 11th and 12th, with a fair attendance of specialists from the central and southern states. A program of thirty-two papers was carried out, and the members and visitors report an interesting and pleasant meeting. Much credit is due the local medical fraternity of Cincinnati for a number of social features.

THE ALLEN COUNTY MEDICAL SOCIETY.

At the open meeting of the Allen County Medical Society held March 26th, a paper upon "Diagnostic Value of the Examination of the Feces" was presented by Dr. C. D. Aaron, of Detroit. The paper was a very interesting one and elicited much discussion from

the members, among those taking part being Drs. McCaskey, Rhamy, Buchman, Barnett and Sweringen. The paper appears in full in the April number of the *Journal-Magazine*.

At the regular meeting on April 9th Dr. G. B. M. Bower presented a paper upon "Medicine Before 1800," in which he called particular attention to the methods of treating various internal diseases, and particularly mentioned the crude and unscientific surgical methods that were in vogue before the beginning of the nineteenth century. Dr. Alice B. Williams presented a paper upon "Therapeutics from 1853 to 1900," which especially brought to mind the advancement that has been made in therapeutics during the past twenty-five years, and particularly emphasized the growing importance of the treatment by serum injections, which have grown into favor within the past ten years. Both papers were very generally discussed.

At the regular meeting on April 23rd Dr. C. B. Stemen presented a very interesting paper upon the subject of "Fractures of the Clavicle and their Treatment," which met with very general discussion. Dr. J. S. Boyers presented a paper upon "Carbolic Acid." This paper brought out quite an extended discussion relative to the value of pure carbolic acid as a local application in burns.

The society elected Dr. K. K. Wheelock a member of the nominating committee for the coming meeting of the Indiana State Medical Society.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

PHYSICIANS NOT OBLIGED TO MAKE CALLS.

Considerable interest among physicians has been aroused by the recent decision of the Indiana Supreme Court in effect that a licensed practicing physician is not bound to attend any patient by whom he is called unless he has made a contract for such services. Even the fact that he may have served as family physician does not impose the obligation to go. The court also ruled that the physician is not liable for the consequences of his refusal to answer calls.

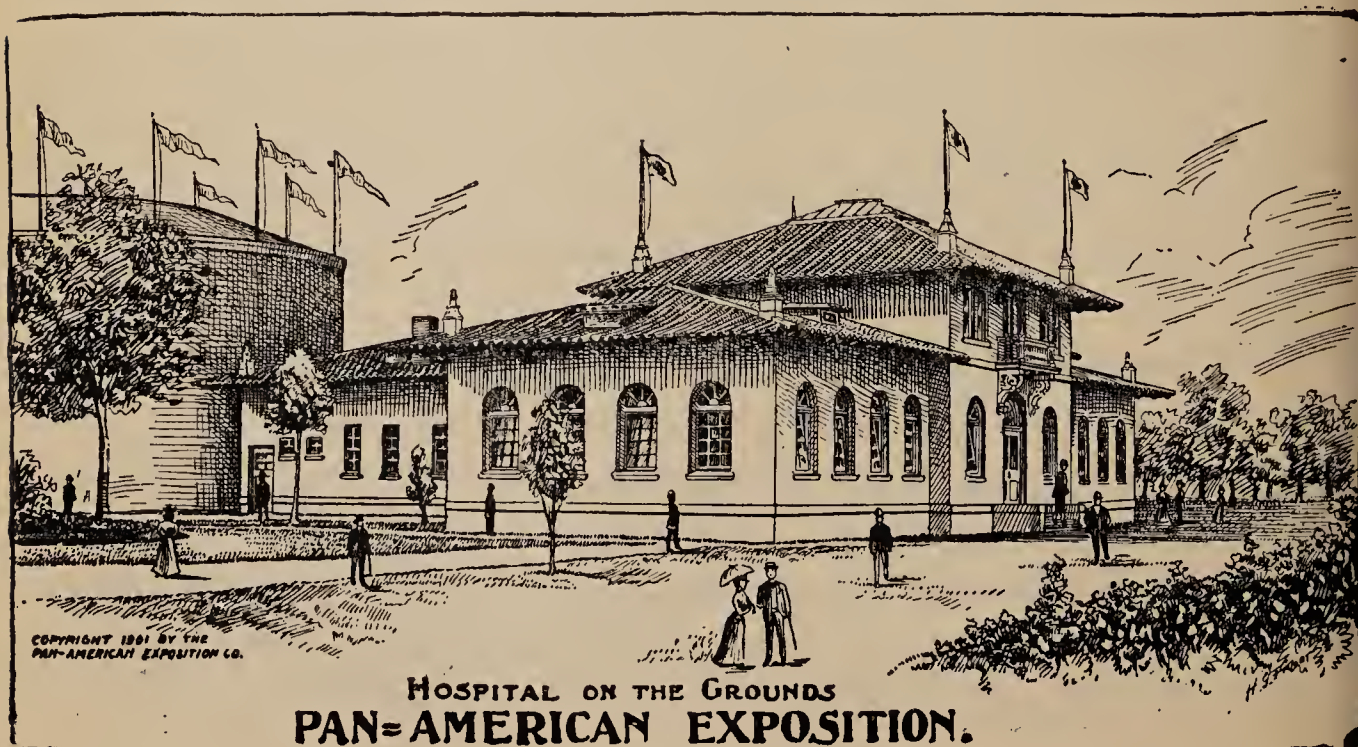
This decision is looked upon with favor by medical men, as they do not consider their profession a quasi-public one, which requires them to answer summons against convenience or inclination. While no reputable and conscientious physician will refuse his services in the relief of suffering, from purely selfish or mercenary motives, yet he resents any attempt to compel him by law or force to render services whenever or wherever called, and under any

and all conditions. The ruling of the Indiana court is therefore looked upon as being not only correct, but eminently proper.

THE PAN-AMERICAN EMERGENCY HOSPITAL.

The Pan-American Exposition to be held at Buffalo this year will certainly be on an elaborate scale, and has already aroused much interest among people all over the world, and is of particular interest to the people of the United States and Canada who will attend in large numbers. Physicians will be particularly interested in the Emergency Hospital, which has been erected upon the grounds for the care of visitors who may be ill or injured while attending the exposition. The importance of this adjunct to the exposition may be realized when it is announced that up to the first of March 504 cases were treated, these cases including all forms of sickness and accidents to workmen employed upon the construction work. In this connection it is well to know that the number of cases treated at the Omaha Exposition was about 3,000, while the history of the World's Fair, in Chicago, gives a total of 11,602.

In the way of appointments the hospital is equipped with the latest and most approved appliances, and the arrangements, location and general construction is all that could be desired in a first-class hospital. That the institution is to be conducted according to the most approved ideas, is guaranteed when it is known that Dr. Roswell Park is the director. We herewith publish a cut of the hospital building, which has been kindly furnished by the superintendent of the press department of the exposition.



SUCCESS.

In these days of overcrowding in almost all the vocations of life there comes a time (many times to some) in the lives of most men when they need stimulation and encouragement to keep them from falling by the wayside. Let us not forget that it is better to have tried and failed than never to have tried. All heroes haven't fought winning battles. The honest, earnest, effort one makes, rather than the success one attains, is the mark of manhood.

The world could better do without the 'winners' in life's battle than the 'losers.'

Success has been achieved by many who would have failed had it not been that others failed of achievement in the same line before them and in failing had set up the sign 'no thoroughfare' at the entrance to the 'blind leads' which they spent their lives in proving blind, and thus made the discovery of the road to success easier.

Here's to the man who tries and fails
But is stout of heart and trims his sails
For another try,
Without waste of time for fear or sigh;
And with jaws tight set and undimmed eye
Is trying still when he hears the cry—well done.
From Him "who doeth all things well"
And knows the value to the world
Of those who work, and work—and fail.

Here is a little bit from the pen of C. F. Lester, which appeared in a recent number of *Success*, from which many, if not all, of us, may get some comfort.

" "So you've lost your race, lad?
Ran it clean, and fast?
Beaten at the tape, lad?
Rough? Yes, but 'tis past.
Never mind the losing—
Think of how you ran;
Smile; and shut your teeth, lad—
Take it like a man!
Not the winning counts, lad,
But the winning fair;
Not the losing shames, lad,

But the weak despair ;
So when failure stuns you,
Don't forget your plan—
Smile, and shut your teeth, lad—
Take it like a man!
Diamonds turned to paste, lad?
Night instead of morn?
Where you'd pluck a rose, lad,
Oft you'd grasp a thorn?
Time will heal the bleeding—
Life is but a span;
Smile, and shut your teeth, lad—
Take it like a man!
Then, when sunset comes lad,
When your fighting's through,
And the Silent Guest, lad,
Fills his cup for you,
Shrink not—clasp it coolly—
End as you began;
Smile, and close your eyes, lad—
Take it like a man! ”

M. F. P.

INVESTIGATIONS CONCERNING THE CAUSE OF CANCER.

It would seem from a paper read before the Medical Association of Central New York, October 16, 1900, (*Buffalo Med. Jour.*, March, 1901), that the Buffalo laboratory for the investigation of cancer is in danger of being handicapped in its work through lack of appropriation of funds by the legislature. It is to be hoped that the alarm was sounded in time to prevent the threatened danger. The United States was the first to move in this important matter and the foundation of the Buffalo laboratory “has created widespread interest even in foreign lands, and since the period of its foundation Germany has formed a national cancer society, which proposes to undertake the work of collecting reliable statistics upon this subject. The English have, likewise, established a national cancer society and two institutions in London have provided funds for research. A benevolent lady of Boston has bequeathed to

Harvard university a sum of \$200,000, the income of which is to be devoted to the investigation of this subject."

Time and money are the great elements of success in this and similar undertakings and it is to be hoped that the proud distinction New York has won through being the first worker in this important field may ere long be succeeded by the glory of being the first to discover either the cause of, or the cure for, cancer, or both, and that she may not be impeded in her efforts in this direction by an ignorant legislature.

M. F. P.

NEWS NOTES AND COMMENTS

DR. HERMAN NIERMAN RETURNS.—It is announced that Dr. H. Nierman, who has been spending the winter in Ann Arbor, taking a post-graduate course in medicine, is soon to return to Fort Wayne to resume his practice.

DELEGATES TO NATIONAL TUBERCULOSIS CONGRESS.—Governor W. T. Durbin appointed Drs. Albert E. Bulson, Jr. and L. P. Drayer, of Fort Wayne, delegates to the National Tuberculosis Congress, which convened in New York city May 14 to 17.

DR. STEMEN'S MARRIAGE.—The local papers announce the fact that Dr. W. E. Stemen, of Fort Wayne, is soon to be wedded to a charming young lady residing at Kansas City, and that he will bring his bride to Fort Wayne, where they will be at home to their friends after June first.

DRS. DEMING AND DRAYER RETURN FROM NEW YORK.—Fort Wayne's very efficient city bacteriologist, Dr. L. P. Drayer, has recently returned from New York where he took a special course in pathology, bacteriology, and general medicine. Dr. N. L. Deming accompanied Dr. Drayer and devoted special attention to surgery.

DR. C. E. STULTS SERIOUSLY ILL.—Dr. Charles E. Stults, who recently returned from Colorado where he went to benefit his health, is reported in a very serious condition and expected to die at any

moment. His affection is phthisis pulmonalis and he has been ailing in health for over a year. (Later—Dr. Stults died April 29.)

DR. C. B. STEMEN HONORED.—Governor W. T. Durbin has recently announced the appointment of Dr. Christian B. Stemen, of Fort Wayne, as a Trustee of Purdue University, to succeed the late General Harrison. Dr. Stemen is Dean of the Fort Wayne College of Medicine, and has been associated with educational institutions for a quarter of a century. The appointment has been quite generally approved.

THE DOCTOR IN "INNOCENTS ABROAD."—Every little while there appears a statement in one of our medical journals concerning some doctor who is, or was, the original of Mark Twain's doctor in "Innocents Abroad." It will be a source of some satisfaction to know that in order to definitely settle the question as to who the original was, Dr. William Allen Pusey, of Chicago, has recently written Mark Twain and received in reply a letter to the effect that the real doctor in "Innocents Abroad" was Dr. A. Reeves Jackson, of Chicago.

AMERICAN MEDICINE.—The first number of the first volume of *American Medicine* came from press April 6th. This is the new weekly journal "founded, owned and controlled by the medical profession of America," and edited by the well known writer, Dr. George M. Gould. If the first number is any indication of what future numbers will be, we are warranted in saying that *American Medicine* will very soon prove to be the leading medical weekly of the United States. With a capable, enterprising, ethical and conscientious editor, and with a subscription list already numbering 5,000, *American Medicine* steps at once to a position of prominence not often attained by periodicals of advanced age. The first number consists in 65 pages of reading matter and 110 pages of advertising. The following departments are represented: Original articles, Correspondence, Editorial Comment, Book Reviews, Practical Therapeutics, The World's Latest Literature, and Public Service.

ENDURANCE OF VEGETARIANS.—Baels is reported in the

Deutsche Med. Woch. as having stated at the meeting of the Berlin Medical Society, March 20th, that he has found the vegetarian Japanese actually more enduring than meat-eating foreigners in control tests. In the interior of Japan the food is necessarily limited to barley or buckwheat, with one quarter rice, the soya bean and no meat. The rich Japanese who eat rice more abundantly, have soft bones owing to the lack of lime in the rice. The children who eat much rice have grooves in their bones from the bands of their clothing, although rachitis is unknown in Japan. Among the tests of endurance he mentions that he once drove a certain distance in fourteen hours, changing horses six times. A Japanese with a loaded cart made the same trip on foot at the same time in fourteen and one-half hours. He had two rickisha men trot 40 km. with his weight of 80 kg. every day in the heat of the sun. At the end of fourteen days one of the men had gained 5 kg. in weight. He then added a little meat to their food and the men said it made them feel tired, so it was suspended after three days. At the end of the twenty-second day of the test the men were as full of energy as at first.

PRIZE ESSAY ON THE DANGERS FROM QUACKERY.—The Colorado State Medical Society offers a prize of twenty-five dollars for the best essay, if deemed worthy of the prize, pointing out the dangers to public health and morals, especially to young persons, from quackery as promulgated by public advertisements.

The competition is open to all. Essays must be typewritten in the English language, and submitted before May 15th, 1901. Each essay must be designated by a motto, and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the Society for publication. Others will be returned on application. Essays should be sent to the Literary Committee, room 315, McPhee Building, Denver, Colorado.

“RUDOLF VIRCHOW FUND.”

TO THE AMERICAN MEDICAL PROFESSION:

On October 13th, 1901, *Rudolph Virchow* will be 80 years old. When he completed his seventieth year a fund was started in his honor to enable the great master to facilitate scientific research by establishing ownerships, and by encouraging special medical and

biological studies. Contributions to that "*Rudolf Virchow Fund*" were furnished by those in all countries interested in progressive medicine, as a homage to the man whose name is always certain to arouse admiration and enthusiasm.

In Berlin a large committee containing amongst others the names of A. Bastian, V. Coler, A. Entenburg, B. Fraenkel, O. Israel, Fr. Koenig, C. Posner and W. Waldeyer has been formed to call for contributions which are to be added to the original "*Rudolf Virchow Fund*" so as to increase its efficiency. The committee expresses the opinion that in no better way, and in none more agreeable to the great leader of modern medicine, can his eightieth birthday be celebrated, and ask for the sympathy and cooperation of all those engaged in the study and practice of scientific medicine all over the globe.

The undersigned have formed a sub-committee for the purpose of making the American profession acquainted with the intentions of the Berlin committee, and urge their colleagues to participate in honoring the very man who has done more, these fifty years, than any other to make medicine a science, and international.

Subscriptions should be sent to their secretary, who will receipt therefor.

CHARLES A. L. REED,

President of the American Medical Association.

HENRY P. BOWDITCH,

President of the Congress of American Physicians and Surgeons.

WILLIAM K. WELCH,

Johns Hopkins University.

ROBERT F. WEIR,

President of the New York Academy of Medicine.

A. JACOBI,

Secretary, 110 West 34th St., New York.

PHYSICIANS DENOUNCE REPRESENTATIVE LOUITTIT AND HIS MEASURES.—At a recent meeting of the Allen County Medical Society a resolution severely censuring Representative Louttit for his anti-vaccination crusade, was passed. The resolution is as follows:

Whereas, The Hon. George W. Louttit, late representative of Allen County, showed by his vote and pernicious activity in the passage of the bill for the regulation of the practice of medicine in

the state of Indiana, that he was ignorant of the needs of the people in the state, and was dishonestly interested against their best interests, and,

‘Whereas, He was instrumental in surreptitiously inserting a clause in the compulsory educational bill by which vaccination is made voluntary on the part of the parent, and which fact has already caused a dangerous spread of small pox in our state, and which will be the means of placing in jeopardy the lives of thousands of children by reason of insufficient protection from the scourge of small pox, when the concensus of medical opinion supported by one hundred years of proven experiments demonstrates beyond a doubt that the dreaded scourge, small pox, has been robbed of its terrors and that thousands of lives have been saved by reason of vaccination, therefore be it

“Resolved, That the Allen County Medical Society demands in the interest of the public, that the Hon. George W. Louttit be severely condemned for his unfriendly action toward the public, whose representative he pretended to be, but who, in the face of a petition signed by over 1,200 citizens of Fort Wayne, still perniciously and persistently used his delegated authority against the best interest of the people, and to the end that the public health be endangered and the lives of our children be exposed to death dealing disease; and be it further

“Resolved, That the Allen County Medical Society as a body, and its members individually, stand pledged to oppose his political aspirations now, and until such time as he shall prove that his uses of representative authority were not obtained for private purposes; and be it further

“Resolved, That the Allen County Medical Society and its members together with all other physicians, of whatsoever school, denounce the Hon. George W. Louttit as a man totally unfit to represent any political party in any capacity within the gift of the people.

“KENT K. WHEELLOCK.

“CARL SCHILLING.

“C. E. BARNETT.”

Committee.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

ACUTE SPINAL ATAXIA (NONTABETIC) AND ITS RELATION TO OTHER FORMS OF ACUTE ATAXIA.—Dana gives the following summary in his article on acute spinal ataxia (nontabetic), and its relation to other forms of acute ataxia: 1. Acute ataxia occurs occasionally in tabes dorsalis, but is associated usually with characteristic symptoms. 2. Acute non-tabetic spinal ataxia occurs as a manifestation of spinal syphilis or senile arterial changes, and shows itself by a sudden onset of temporary motor weakness and bladder troubles, great ataxia, and minor sensory disorders. It may effect only one extremity, but usually affects the lower limbs. The tendency is to nearly complete recovery. 3. Acute bulbar or bulbocerebellar ataxia occurs as a sequel of some acute infection, and is usually the beginning of a form of multiple sclerosis. 4. Acute neuritic ataxia occurs as the result of multiple neuritis of the sensory type. It is usually in the non-alcoholic forms of neuritis, especially those due to metallic poisons, like arsenic, or to diphtheria.—*Phil. Med. Jour.*

ASTHENIC BULBAR PALSY.—This somewhat mysterious affection was first brought to the notice of neurologists by Erb, in 1878, although its occurrence had been previously observed by Wilks, and by Wernicke. Oppenheim was chiefly instrumental in establishing it as a clinical entity, and since his original contribution, in 1887, quite a large number of cases have been reported. In this country the condition has been observed by Collins, Wheaton, Berkeley, Sinkler, Burr and McCarthy.

The chief characteristics of the disease are ptosis and paralysis of the external ocular muscles, and of those of the face, of mastication, and of the tongue, palate and larynx. Speech and swallowing are greatly impaired, and mastication is difficult. Sometimes the muscles of the neck, trunk and extremities are paretic. Under voluntary use of the muscles the paresis increases rapidly, and eventuates in complete loss of energy and almost total paralysis. The exhaustion may be so extreme that after a few moments conversation the patient is unable to utter a word, and that the bolus of food, partially masticated, lodges in the mouth for want of strength to swallow it. The symptoms are subject to rapid changes, and may vary from hour to hour, and as whole, the disease presents remissions lasting for several weeks or months. Sensory changes, pain, reactions of degeneration, and impairment of the sphincters, are absent. A peculiar electric reaction has been described by Jolly as characteristic of the disease. It is a rapid exhaustion of the muscles under the influence of the faradic current (myasthenic reaction), and is analogous to the fatigue or utter exhaustion that follows voluntary movement of the muscles.

While cures have been reported, the disease is usually fatal. Hitherto the dictum of Oppenheim that the disease had not an anatomic basis but was a pure neurosis, has been generally accepted, and was corroborated by the result of autopsies, which showed either no changes, or merely unimportant ones. For this reason most authorities ascribe the disease as a neurosis from autointoxication. Later, however, Dejerine and Thomas have reported an instance of the disease, typical clinically, in which they found, in addition to trivial cortical changes, a decided atrophy of the pyramidal tracts in the pons and medulla. This they considered as probably a primary degeneration since it bore no definite relation to the alterations in the cortex. Aside from this they also noted a high degree of fatty degeneration of the muscles of the larynx, with similar, but milder changes, in the tongue and pharynx. Whether the muscular degeneration was primary or secondary, they were unable to decide, in the absence of knowledge as to the conditions of the muscles of the larynx in cases that have died of hemiplegia or of pseudobulbar palsy. It seemed to them, however, as if the muscular degeneration was more recent than the changes in the pyramids.

These observations of Dejerine and Thomas are an interesting

and important contribution to the subject of asthenic bulbar palsy. They suggest the possibility, as the authors properly remark, that the disease is not strictly a morbid entity, but merely a clinical syndrome that may be produced by a variety of conditions.—*American Medicine*.

INTESTINAL PERFORATION IN TYPHOID FEVER.—W. Osler (*Phil. Med. Jour.*, Jan. 19, 1901), in discussing perforation and perforative peritonitis in typhoid fever, directs attention to the fact that a very large proportion of the cases of perforation show conditions which are not at all characteristic, according to the general description of this condition. He believed that with proper diagnosis surgical intervention would greatly reduce the mortality from perforation, and perhaps about half the cases could be saved. The great trouble is that we know too little about the diagnosis of perforation. His recommendations are that in cases in which the occurrence of perforation is suspected a skilled diagnostician should be, if possible, in constant attendance so that the diagnosis may be made as early as possible, and if perforation occurs surgical intervention should be undertaken at once. The accident is likely to occur during the more severe cases and during the height of the disease. It occurs more frequently in cases showing diarrhoea and tympanites; of thirty cases observed at Johns Hopkins hospital twenty had diarrhoea and six had both perforation and hemorrhage. If marked abdominal symptoms appear perforation should be watched for constantly. He recommends that one should be always on the alert for any distinct abdominal pain, particularly when it shows severe onset and is intense and tends to grow worse, it should be especially determined whether the pain is diffuse or localized toward the lower right side of the abdomen. One should also note whether the abdomen is flat, scaphoid, or distended, particularly whether it is uniformly distended, whether respiratory movements are present over the abdomen, and whether they are uniform and seen both above and below the navel. One should note tension and pain on palpation, muscular rigidity, and spasm, particularly in the epigastric region and right iliac fossa, and whether spasm is found by rectal examination. The liver dullness should also be watched in the middle, nipple, and mid-axillars lines, auscultatory percussion may be an aid in this. Any tenderness or

fulness discovered by rectal examination is important. Blood and sloughs should be looked for in the stools and any change in their character noted. As to the general condition of the patient, any change in expression should be noted, together with increase in the rapidity of the pulse, decided change in the temperature, sudden increase in the respirations, or a shallowness or sighing character of the respiration. The occurrence of sweats, of vomiting and of hiccup may be important, and one should also look for a change in the leucocyte count, having in mind that there is an almost constant leucopaenia in typhoid fever. He describes in detail three cases in which, in the absence of typical symptoms, a diagnosis of perforation was made and operation performed. The first patient died, apparently chiefly from the effects of the disease itself. In the second case death occurred on the table. In this instance the walls of the gut were so swollen and infiltrated that sutures would not hold in the neighborhood of the perforation. In the third case complete recovery occurred. As to the general results of operation in the Johns Hopkins hospital, Osler mentions one series of eleven cases in which five recoveries occurred. In all sixteen cases have been operated upon, with six recoveries, a percentage of 37.5—*Amer. Jour. Med. Sciences.*

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynaecology in the Fort Wayne College of Medicine.

INTESTINAL STRANGULATION.—C. P. Thomas, M. D. (*Amer. Jour. Med. and Surgery*), reports a case of intestinal strangulation following hysteropexy. The patient, age 42, was first seen thirty-six hours after the onset of an attack of intestinal obstruction. An incision was made slightly below McBurney's point, a loop of strangulated gut about ten inches long, presenting. The general cavity was filled with serum which contained some fecal matter. She had been submitted to ventral fixation six months previously, and the strangulation was found to be due to the passage of the gut underneath the newly-formed utero-peritoneal ligament, be-

tween the uterus and the bladder. It could not be freed until after that false ligament was severed.

Ten inches of strangulated ileum were resected and the ends united with a Murphy button. An uninterrupted recovery followed, the button passing the seventh day. He says the attachment was made posteriorly as advised by Kelly, and concludes that the operation is faulty and not the particular method by which this one was done.—*Med. Progress*, February, 1901.

FOURTEEN AND ONE-HALF HOURS' ARTIFICIAL RESPIRATION IN A CHILD ONE WEEK OLD—RECOVERY.—The case of a child one week old is reported, which was operated on for phimosis under chloroform, passed into a cyanosed condition and required fourteen hours of steady application of artificial respiration together with very active stimulation with brandy and came through all successfully without apparent damage.—Geo. E. Keith in *The Lancet*.—*Jour. Am. Med. Assn.*

TREATMENT OF EMPYEMA.—I. Empyema is best prevented by promptly evacuating all considerable inflammatory effusions.

2. In the diagnosis of these effusions, by means of exploratory aspiration, the skin should be punctured by a tenotome at the point where the needle is to be driven in.

3. Serous effusions are best evacuated by aspiration. If they reaccumulate after the third evacuation, they should be subject to continuous siphon drainage; the puncture being made by a small trocar and cannula, the latter being of such a size that a small drainage tube may be slipped through it.

4. Recent empyemata are best treated by continuous siphon drainage, the tube being introduced through a cannula of at least the diameter of the little finger.

5. When, because of a narrow intercostal space or because of constant blocking with fibrinous material, siphon drainage thus provided is inadequate, an inch of one of the ribs (usually seventh or eighth) should be resected, and a drainage tube the diameter of the thumb should be used.

6. When the conditions are such that it is obviously impossible for the lung to expand under the influence of siphon drainage and respiratory exercises, Delorme's operation of stripping the pseudo-membrane from the compressed lung should be attempted.

When Delorme's operation is impracticable, a resection of the ribs (Estlander) or the chest wall and thickened pleura (Schede), corresponding in extent to the size of the underlying cavity, is indicated.—E. Martin, *Therapeutic Gazette*.—*Medical Monitor*.

SUCCESSFUL TRANSPLANTATION OF OVARIES.—One of the most important contributions ever made to the literature of ovarian surgery is that of Dr. Robt. T. Morris, professor of surgery in the New York Post-graduate Medical school, which appeared in *Medical Record*, January 19, 1901. He has successfully transplanted ovarian tissue from a healthy woman to a castrated one with a subsequent pregnancy resulting! The portion of healthy ovary to be transplanted is introduced within a slit in the broad ligament, in such a way that the uncut portion of the ovary projects into the peritoneal cavity, while its raw surface is in contact with that which has been exposed by splitting the broad ligament. The tube and its fimbriated extremity must, of course, have remained intact for any possibility of the occurrence of pregnancy. Sutured here, primary union gives an ovary which continues to discharge ova as in its normal position. Dr. Morris and Dr. Frank have each had a patient become pregnant after such an operation.

Their success raises a number of important questions, chief among them being: Whose baby is it? Of course, "upon the face of the returns," the product of conception is the child of the woman who bears it; she has conceived, has carried the fetus in utero and has borne the pains of child-birth. But—is the child truly hers? If the woman who furnish the ovary is neurotic, may not the progeny of the healthy "mother" become insane or epileptic, or criminal? May not a syphilitic child be thus born of a pure mother? May not a tendency to tuberculosis, or cancer, or what-not, be transmitted through the "intermediary host?" Would a son born of royal parents from an ovary transplanted from a peasant be a legitimate sovereign when he ascended the throne? These and other equally interesting queries arise from the remarkable report made by Morris; and may yet disturb the minds of more than medical men in the process of settlement.—*Am. Jour. Surg. and Gynecol.*, April, 1901.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, and the Allen County Orphan Asylum

Professor of Ophthalmology in the Fort Wayne College

of Medicine, Fort Wayne, Indiana.

PERMANGANATE OF POTASH AS AN ANTISEPTIC SOLUTION IN THE TREATMENT OF EYE DISEASES.—Dr. William H. Wilde (*Chicago Op. Soc. Rep.*) says that he has recently been using solutions of permanganate of potash as a cleansing solution in the treatment of various inflammatory diseases of the eye which are accompanied with profuse secretions. In the treatment of ophthalmia neonatorum and in gonorrheal ophthalmitis in the adult, he finds that the secretions disappear more rapidly with the use of permanganate of potash solution than with any other means. The gonococci become greatly diminished in number a short time after its use, and he relies upon it more implicitly than he does upon either the bichloride of mercury, formalin, or any of the strong antiseptic solutions.

ADRENALIN SOLUTIONS.—At a recent meeting of the Chicago Ophthalmological Society (*Ophthalmic Record*, May) Dr. Albert E. Bulson, Jr., presented a preliminary report upon the use of Adrenalin solutions in ophthalmology. He stated that he had been experimenting with solutions in the strength of 1-10,000, 1-5000 and 1-1,000, finally deciding that the strongest solution was the best for effecting bloodless operations upon the eye, and upon the nose and throat. He reported that blanching of the tissues within a very few seconds is accomplished by applying a few drops of the 1-1,000 solution, and that this effect lasts from one to four hours. This blanching is accomplished even with the presence of a superficial inflammation, such as conjunctivitis, and to a less extent with the deeper inflammations, such as iridocyclitis. The solutions are non-toxic, non-irritating, and quite permanent, if not unduly exposed to light and air. He prefers the solutions to the ordinary solutions of the suprarenal gland, as prepared from the dried gland.

LIMITATIONS OF THE LARYNGOLOGIST IN THE GENERAL TREATMENT OF NOSE AND THROAT DISEASE.—Dr. H. W. Loeb (*Jour. Amer. Med. Assn.*, May 4, 1901), says that many of the diseases which the laryngologist is called upon to treat demand general treatment in order to effect satisfactory results, and that this general treatment should be administered by the general practitioner. As an evidence of the recognition of the part that general systemic disturbance plays in the causation of local manifestations in the nose and throat, he mentions twenty-one authorities, who in text books advocate general treatment as constituting the major portion following the local treatment for chronic pharyngitis.

In conclusion he ventures the following as limitations of the laryngologist in the general treatment of nose and throat diseases: 1. Acute conditions of the nose and throat influenced by remedies which have a local effect. 2. Rheumatic nose and throat conditions which exhibit a positive and early relief under appropriate treatment. 3. Syphilis of the nose and throat where general treatment may be best observed by watching its effect upon the local lesion and where the local process is rapidly destructive. Even under these conditions the patient's chances might be improved by assistance from one whose attention is less directed to localism.

NOTES ON ADRENALIN AND ADRENALIN CHLORIDE.—Dr. E. F. Ingalls, at a recent meeting of the Chicago Laryngological Society, reported that he had been using Adrenalin in its pure form, and solutions of Adrenalin prepared by dissolving the active principle in water, with very satisfactory results in the treatment of acute congestive diseases of the nose and throat, and as an aid in the performance of bloodless operations in the nose. He believes that the pure Adrenalin triturated with sugar of milk, in the strength of 1-5,000 or 1-2,500, will prove an effective powder to be used as snuff in the treatment of various inflammatory conditions of the nose, but particularly to relieve hay fever sufferers. He also believes that the Adrenalin solutions in strength of 1-5,000 and 1-1,000 will prove serviceable for the same purpose, but that they must be sprayed into the nose and throat without much force. In acute rhinitis, acute laryngitis, oedema of the glottis and several other forms of acute inflammation of the nose and throat, the solutions

work beautifully, reducing the congestion in a very few seconds and maintaining this effect for two or three hours. The repetition of the treatment at three or four hours interval in several instances tended to entirely control the inflammation. In intra-nasal operations the solutions enable the operator to remove polypi, spurs and enlarged turbinals with but an insignificant amount of hemorrhage. Dr. Ingalls believes that in epistaxis from various causes, an Adrenalin solution used several times a day will undoubtedly be productive of great benefit, and in many cases it will effect a cure. He also thinks it quite probable that when applied to acutely congested cords in vocalists it will reduce the swelling and congestion so thoroughly that the voice may be used for two or three hours with comparative ease, and possibly with normal efficiency.

(Dr. Ingall's experience with Adrenalin solutions is very similar to our own, and we can unhesitatingly recommend a 1-1,000 Adrenalin solution as a thoroughly efficient vaso-constrictor, and one of our most reliable astringents and hemostatics. In reducing congestions of mucous surfaces, and in the performance of bloodless operations upon mucous surfaces, Adrenalin is sure to establish itself as a valuable resource of the ophthalmologist and laryngologist.)—Ed.

BOOK REVIEWS.

FISCHER—INFANT-FEEDING IN HEALTH AND DISEASE.—A Modern Book on all Methods of Feeding. For Students, Practitioners and Nurses. By Louis Fischer, M. D., Attending Physician to the Children's Service of the New York German Poliklinik; Bacteriologist to St. Mark's Hospital; Professor of Diseases of Children in the New York School of Clinical Medicine; Attending Physician to the Children's Department of the West-side German Dispensary; Fellow of the New York Academy of Medicine, etc. Containing 52 Illustrations, with 16 Charts and Tables, Mostly Original. 368 pages, 5 3-4x8 inches. Neatly Bound in Extra Cloth. Price, \$1.50, net. Delivered. F. A. Davis Company, Publishers, 1914-16 Cherry St., Philadelphia, Pa.

There has during recent years been a marked increase in books dealing with the ailments of children. This little brochure forms a welcome and valuable addition to the list. It gives some interesting data on the anatomy and physiology of the digestive organs in children and furnishes an excellent guide in dealing with the various problems of infant feeding, the complexity and importance of which everyone will readily recognize. The book is well illustrated and is cordially commended to all those interested in the subject which must certainly constitute a large part of the medical profession.

G. W. M.

DISEASES OF THE NERVOUS SYSTEM.—A Text Book for Student and Practitioners of Medicines. By H. Oppenheim, M. D., Professor at the University of Berlin, Authorized Translation by Edward E. Mayer, A. M., M. D., Pittsburg, Pa. First American from the Second Revised and Enlarged German Edition with Two Hundred and Ninety-three Illustrations. Philadelphia and London. J. B. Lippincott Co., 1900.

The position which this distinguished author has long occupied among the neurologists of the world will make an American

translation from the second German edition of his work on the nervous system, a very welcome visitor. The volume is exhaustive in its treatment of the subject and is among the very best of the many text books dealing with the nervous system.

An excellent feature of the work is the large amount of space given to the description of the methods of examination and general symptomatology. As the book is avowedly designed for students and general practitioners such an introduction is absolutely necessary. A brief resume of the anatomy, physiology and general pathology of the nervous system is given which is perhaps desirable, although it would be still more desirable if such information would be obtained by the general practitioner from the treatises on anatomy leaving more space in works of this character to deal with the various questions of a purely pathological character.

The mechanical execution of the book is excellent and it is recommended as a valuable edition to the library of any one having to deal with disease of the nervous system. G. W. M.

THE INTERNATIONAL MEDICAL ANNUAL.—A Year Book of Treatment and Practitioners Index, 1901. New York. E. B. Treat & Co. Cloth, \$3.00.

This publication has reached its nineteenth year. Its continued popularity marks it as a standard in its class.

The same lines have been followed in the present volume as obtained in the previous volumes.

The book gives as concise and comprehensive a review of the advances made during the year in the treatment of diseases and injuries as could be expected in a volume of its size (682 pages). It is well indexed and therefore handy as a reference book. The large number of foreign contributors and references is rather remarkable.

The only adverse criticism we have to offer relates to the advertisements. We would suggest that in the future all advertisements in the front of the book and on the covers be eliminated. That a book containing an introductory article deploring the fact that "A race of medical men was growing up who knew nothing about drugs or their actions" should devote a number of its pages (including inside of covers and fly leaves) to advertising proprietary medicines is to say the least not quite consistent. P.

FORT WAYNE MEDICAL JOURNAL-MAGAZINE.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

ANAESTHESIA.*

By CHAS. O. WILTFONG, M. D.

House Surgeon, College of Physicians and Surgeons, Chicago, Illinois.

The subject of anaesthesia is one of more than interest, from various standpoints. As house surgeon of the College of Physicians and surgeons of Chicago, I have had no little experience with anaesthesia and I have felt a growing interest in the subject, particularly when I remember the carelessness with which, in former years, in my association with medical men in general practice, I have seen the various forms of anaesthesia used. Much of the mortality from anaesthesia is undoubtedly due to the faulty administration of the anaesthetic, ignorance of the anaesthetizer, and lack of judgment in the selection of the proper anaesthetic to be used.

Every member of the medical profession should be thoroughly acquainted with the physiological action of the various anaesthetics; should be able to choose the best agent for a given case, and should be perfectly competent to deal with any accident or emergency which may arise during the administration; above all things,

*Read before the Marshall County Medical Society at Plymouth, Indiana, April 11th, 1901.

the administration should never be entrusted to a layman, nor should the operator in a surgical case ever endanger the life of his patient by attempting to give his own anaesthetic and operate at the same time, for truly it is false economy. The anaesthetizer should have no duties to perform other than a careful observance of the condition of the patient throughout the entire duration of the anaesthesia.

The subject naturally divides itself into two parts, general and local anaesthesia, the former of which I will now consider. The first question to confront us is, which is the best anaesthetic to be used for the case in hand. This is to be decided by a thorough and rather systematic examination of the patients' condition, his age, environments, nature of the operation, the posture to be assumed, and the skill of the anaesthetizer. Statistics show about one death in three thousand from chloroform and one in fifteen thousand from ether. Notwithstanding the more favorable showing by ether, chloroform will always have its strong advocates from many standpoints. Personally, I believe that ether is in a general way, infinitely the safer.

Among the physical conditions to be noted, I would suggest a few of the most important. In atheromatous conditions of the blood vessels chloroform is less liable to cause rupture; in all other pathological conditions of the circulatory apparatus ether is indicated; particularly in a weak heart or an overtaxed right heart, chloroform acts as a marked circulatory depressant, weakening the cardiac muscle, lowering arterial tension and stimulating the inhibitory ganglia of the heart; ether stimulates the heart, raises arterial tension, and increases the force and frequency of the heart's action. In renal affections and inflammations of the respiratory organs, ether is contraindicated, as it acts as an irritant to the kidneys, sometimes even producing a transitory albuminuria, and is a decided irritant to the mucous membrane of the respiratory tract.

Where no contraindications to either ether or chloroform are present, I have generally used the method of administering chloroform until the patient is thoroughly relaxed, and then changing to ether, thereby counterbalancing the depressing effect of the chloroform and sparing the patient the uncomfortable inhalations of strong fumes of ether during the early administration. An objection to this method might be, the taking of the patient through the most dangerous part of chloroform anaesthesia and then com-

mening with the safer ether. In this latter class of cases a convenient anaesthetic is sometimes found in the mixture of alcohol one, chloroform two, and ether three parts, which has gained considerable popularity in the hands of some anaesthetizers.

The age of the patient should have a bearing upon the choice of the anaesthetic. In children before the age of ten years, chloroform is the better agent, ether acting as a severe irritant to their delicate mucous membrane. In patients over sixty years of age we should seldom give Ether, as these patients are apt to be on the verge of renal and pulmonary degenerative changes. If the anaesthetizer is not well experienced and thoroughly competent, I should say give ether, for ether kills slowly and gives plenty of warning while the accidents from chloroform occur suddenly.

The proper preparation of the patient for anaesthesia will often minimize the evil effects and lessen greatly the ordeal. The bowels should be attended by the administration of a laxative on the night previous, and an enema given on the morning of the anaesthetic, food being withheld for about ten hours, to lessen the nausea and vomiting. Care should be taken that the urine is voided immediately before. Foreign bodies as false teeth, etc., should be removed from the mouth, clothing about the chest removed, and the face well annointed with vaseline. The anaesthetizer should be well prepared to meet any emergency, always being provided with a hypodermic syringe filled with a solution of strychnia or nitroglycerin, a mouth gag and tongue forceps, also a long forceps with which to clear the throat of mucus, should breathing be obstructed. For the administration of chloroform, the Esmarch inhaler is, I believe, the best instrument of its kind, and I must here condemn the use of closed paper cones, glass tumblers and the like. The chloroform should be given in amounts according to the patient in hand and should at all times be well diluted with air.

Much can be accomplished by preparing the patient for the symptoms he is about to experience. I find that they are, as a rule, much more easily controlled by attempting to gain their confidence. Instruct them that the odor will at first produce a choking sensation, that it has a strong, sweetish smell, and that should it become too strong to endure, to mention it and you will let them have more fresh air, thereby saving yourself from having them grasp the inhaler. Tell them they will experience peculiar tingling sensations, and as to breathing, it is a mistake to tell them to take

a deep breath, as one almost invariably finds that ere long the patient will need to be told every time he is to take another breath. He should rather be told to breathe naturally and attempt to go to sleep as soon as possible, the same as when he retires at night. The eyes should then be covered to prevent dropping chloroform into them. Chloroform should always be given by dropping. Begin by holding the mask several inches from the face, with a very few drops of the drug, allow the patient to first become accustomed to the fumes, then slowly and gradually increase the drops and in the same manner bring the mask closer until resting over the nose and mouth. In this manner I cannot see why a patient should, as is often said, "die with the first whiff of the anaesthetic."

The anaesthetic should never be crowded, as it is the large dose inhaled at once that overwhelms the vital centers, while its slow administration habituates them to it.

Ether is best administered by a cone made of cardboard, and with this, like chloroform, much may be gained by first allowing the patient to become accustomed to the fumes. Should he then object to it, he may be instructed to blow the fumes away, after which he obviously will take an inspiration. The eye of the anaesthetizer should always be upon the patient's face, his forefinger upon the facial pulse, the other three fingers behind the angle of the jaw. The patient's head should be turned to one side, thus allowing the excessive flow of mucus to collect inside the cheek, where it can easily be removed by steel sponges.

By the slow and continued administration of the anaesthetic the patient will soon reach the stage of excitement, which stage may vary much in degree; the breathing will soon become deeper and quickened, and here the anaesthetic must be given cautiously indeed. The muscles begin to relax and the conjunctival reflex should then be watched, as its loss means complete relaxation of the body. The jaw must be held well forward, as its dropping back carries with it the tongue, thereby closing the epiglottis and preventing inspiration. With the abolition of the conjunctival reflex we have left but one guide—the pupil; this should be contracted to near normal size and should at all times respond to the stimulus of light. Sudden dilatation and failure to respond to light at this stage is a positive indication for withdrawal of the anaesthetic. With observance of the few rules here mentioned perfect and complete anaesthesia can generally be maintained with,

I believe, a minimum number of accidents. I emphasize the mistake that many anaesthetists make, of not keeping the patient soundly asleep, as it is in this manner that many accidents occur. It is then that the patient breathes imperfectly, swallows his tongue, or vomiting ensues, often followed by an aspiration pneumonia. Throughout the administration great care should be taken not to expose the patient, and at its close he should be placed in a bed, having been warmed by the use of bottles of hot water.

I will not here attempt to enumerate any of the manifold uses of anaesthesia for surgical, therapeutical and diagnostic purposes, but will dwell briefly upon the use of anaesthesia in labor.

The ancient opinion that childbirth is a physiological process, and that therefore the pain should be endured, still exists. In former times this was probably true, but with our women of the present day, subjected to the evils incident to the manners of dress and living of modern civilization, it surely is almost pathological; indeed, do we often find the shock following more severe than that of the severest surgical operation. Why, then, should we not give our patients the benefits of the relief obtained from chloroform, during what is often a trying ordeal. Most drugs in medicine are unsafe, if used injudiciously, and chloroform is safe if properly used. The woman in childbirth is undoubtedly the nearest immune to the accidents of anaesthesia. The left ventricle of the heart is markedly hypertrophied, the action of the heart is aided by the alternate contractions and relaxations of the uterus, and the tendency of anaesthetics to produce anaemia of the brain is counteracted by the labor pains, which give rise to engorgement of that organ. Anaesthetics have no influence whatever upon the foetus.

The object to be sought in labor is that of analgesia, rather than of anaesthesia, and in this state we will have no prolongation of labor, the uterine contractions being involuntary, the perineal muscles being relaxed. Toward the beginning of the second stage a few drops may be administered during each pain. By this method the pain is numbed and the courage and endurance of the patient maintained, without in the least retarding the efforts of the uterus. As the presenting part emerges from the cervix, we may give a little more generously, bringing the patient to about surgical anaesthesia, as the perineum is endangered and delay required for relaxation. This will generally be a sufficient amount unless for repairs of an extensive laceration. Thus by the administra-

tion of a few drachms of chloroform we not only mitigate a great part of the suffering and pain of childbirth, but dispel the fears and dread of future pregnancies.

A number of other anaesthetics have been used with more or less degree of success, but to the general practitioner chloroform and ether, with nitrous oxide and ethyl bromide, are amply sufficient for practical use. Nitrous oxide has come to be an invaluable agent of use for our friends, the dentists. It has been used to some extent by anaesthetists for the purpose of first placing the patient to sleep, then applying the chloroform or ether. I find no particular advantage in the method except in clinical work, when a number of patients are to be operated upon, thereby saving time. The patients are often much frightened at the paraphernalia necessary to its administration.

Ethyl bromide is an exceedingly efficient anaesthetic where the operation can be performed in the short space of primary anaesthesia. In tonsillectomy, or removal of post nasal adenoids, there is a great advantage, due to the fact that the reflex of the larynx is not abolished, blood and foreign bodies gravitating there, being coughed up. This anaesthetic should be given similar to the method of administering ether, about one minute being required to produce relaxation, which lasts from three to four minutes. In the above mentioned cases it is superior to chloroform. The mortality resulting from its use has been greatly diminished of late by improvement in the purity of the drug and proper administration and use.

The subject of local anaesthesia has been one of wide variance in the history of medicine. Many are the drugs which have for a time become popular with the profession, but soon to be discarded on account of impracticability. The agents which have been shown to be of most practical value in local anaesthesia are, the application of cold to the surface to be anaesthetized, either by application of ice or induced by evaporation of ether, spray or ethyl chloride; the use of cocaine superficially or injected subcutaneously; and the infiltration method. Of the various methods used, none is so wonderful as that being obtained at present from spinal subarachnoidean cocainization or spinal anaesthesia. The results obtained from its use have, when properly administered, been attended with marked success. From the reports collected of six hundred cases the result was perfect in 50 per cent. I can best give a brief outline of the subject as collected from literature,

having witnessed but ix cases, three of them laparotomies, by Dr. J. B. Murphy.

The simplicity of the method of administration and the mortality attendant upon the use of general anaesthesia makes it a question whether this method will not in time entirely supplant the use of general anaesthesia where practical.

The sight of injection is the space between the fourth and fifth lumbar vertebra, about one-half inch to the side of the median line. The patient sitting upon the table with the limbs extended and the back curved as far forward as possible, the needle is passed in, in a horizontal direction. As it penetrates the inter-spinous ligament into the spinal canal it is felt that all resistance is overcome and the cerebro-spinal fluid will exude. The amount generally sufficient is about ten minims of the 2 per cent. solution. Great care must be taken as to asepsis. The solution should not be injected unless the cerebro-spinal fluid is escaping from the needle, and then very slowly. The analgesia will generally begin in from three to ten minutes, it sometimes requiring as long as thirty minutes. It almost always begins in the feet, soon involving everything, including the abdominal viscera, up to the costal arch. In rare instances it has extended to the thorax and upper extremities. The sense of contact is not affected, the reflexes are diminished, muscular sense and co-ordination are often affected, giving the patient a peculiar ataxic gait. The sphincters of the bladder and rectum are paralyzed. In successful cases analgesia will last from one-half to two hours, during which time any operation can be done upon the area involved.

Refrigeration is probably found in its simplest form by the use of the ethyl chloride spray. The drug is of great service where but a single incision is to be made, but is objectionable upon inflamed surfaces, as the pain following its use is often more severe than would be the incision itself.

For more extensive operations under local anaesthesia, cocaine has probably been of more service than all other drugs. True, its use has been attended with a number of fatalities, but so is it with the use of many other valuable medicinal agents. Like chloroform and ether, its dangers are much minimized by cautious administration and dosage. The drug paralyzes the terminal filaments of the sensory nerves when brought in contact with them. It possesses remarkable anaesthetic properties upon the mucous membranes, but applied to the unbroken skin it does not anaes-

thetize it. The solution must be introduced intradermically to produce skin anaesthesia.

The most convenient form is a solution of the hydrochlorate of cocaine. The strength of the solution and its proper injection are the main points to be observed. It is the large dose at one time which produces the alarming symptoms. The amount injected should not exceed three grains for any case, one-half a grain being generally sufficient for practical work. Strong solutions should never be used, a 1 or 2 per cent. solution being sufficient. The injection should be first intradermic and then hypodermic. When practicable the use of a constrictor to the circulation by producing anaemia facilitates the anaesthesia, and prevents the rapid absorption of the drug into the general circulation. This constrictor, if relieved slowly, admits a slow absorption of the drug and prevents evil results. At least five minutes should elapse after injection before proceeding to operate, when anaesthesia should be complete. Care should always be taken not to inject the solution into a vein, and the patient should be placed in the recumbent position. A fresh solution should be used, as old solutions lose their anaesthetic properties and are unsafe, for they soon decompose and become septic. In the past year in our clinics we have used cocaine in probably two hundred cases, and by observance of the few rules I have here mentioned I have never met with any untoward manifestations from its use.

Probably the most ideal form of local anaesthesia is by means of the so-called Scleich's, or infiltration method. The simplicity of the method with the application of such a minimum amount of cocaine to the area to be anaesthetized make it at once, indeed, valuable. Leibrich demonstrated that injection of simple water into the tissues, in such a way as to produce artificial oedema, would induce a transitory anaesthesia. Schleich, working upon this theory, discovered that by combining a very small quantity of cocaine with a weak salt solution, the anaesthesia was greatly prolonged without the discomfort produced by water alone, and by the addition of a minute quantity of morphine the action was sufficiently prolonged for the performance of surgical work. The materials required for the procedure consist of a weak solution of cocaine, morphine and common salt in sterilized water, and a good hypodermic syringe. The formula is as follows:

Cocaine hydrochlorate	gr. I	I-2
Morphine hydrochlorate	gr.	I-3
Sodium chloride	gr.	III

In powders to be dissolved in three ounces three drachms of sterilized water.

Thus it will be seen that we have a solution with a strength of one part cocaine in one thousand of water and less than that amount of morphine. It is convenient to have in stock a few of these powders, or better still, tablets may be purchased of the pharmacist containing the above ingredients in the strength indicated. The success to be attained by the use of these simple materials lies wholly in their application. The temperature of the solution should be below that of the body. The needle should not be pushed through the skin, but the injection should be endermic, so that it will distend the skin itself. Sufficient amount should be injected to produce a white, bloodless wheal about the size of a dime. The area thus infiltrated is instantly anaesthetic, it then only remaining to remove the needle, reintroduce at the periphery but still within the wheal, inject enough to form a new wheal, and so continue until the entire line of incision is anaesthetized. The needle may then be passed through the skin and the subcutaneous tissues filled. The fascia, muscles, and periosteum may be treated in the same way. The anaesthesia thus produced will generally last about twenty minutes, and if the patient begins to complain of pain the parts may be reinfiltrated. Pain should be absolutely absent and any indication of it means faulty infiltration. Injection should never be made directly into inflamed areas, but should begin in the surrounding normal tissues, working toward and across the inflamed surface. By this method anaesthesia may be maintained for hours, enabling one to perform quite extensive operations, even to the amputation of a limb or to opening the abdomen, making the method an invaluable one where general anaesthesia is contra-indicated.

SOCIETY PROCEEDINGS.

THE WESTERN OPHTHALMOLOGIC AND OTOLARYNGOLOGIC ASSOCIATION.

The following officers were elected at a meeting held at Cincinnati April 11th and 12th: President, C. R. Holmes, Cincinnati; Vice Presidents, Drs. W. L. Dayton, Lincoln, Neb.; J. O. Stillson, Indianapolis; H. W. Loeb, St. Louis; Secretary, Dr. W. L. Ballenger, Chicago; Treasurer, Dr. O. J. Stein, Chicago. The annual meeting will be held in Chicago in April, 1902.

THE ALLEN COUNTY MEDICAL SOCIETY.

At the regular meeting of the Allen County Medical Society on May 21st, Dr. Mary Whery presented a paper on "Hypertrophy of the Womb, Its Cause and Cure." Drs. Porter and Wheelock presented histories of interesting cases of recent date.

On motion of the Society it was decided that the officers of the Society should at once correspond with physicians from New York and Chicago, to get volunteers to present papers at the mid-summer meeting of the Society. It was also decided that the committee on arrangements make preparations for the mid-summer meeting to be held at Robison park. Later; Dr. John P. Musser, of Philadelphia, has accepted the invitation to present a paper at the meeting.

On May 9th the members of the Allen County Medical Society attended, by special invitation, a meeting of the Isaac Knapp Dental Coterie held in the parlor of the Wayne Club, and listened to a paper by Dr. George E. Johnson on the subject "Anaesthesia." The paper touched briefly upon the subject of cocaine anaesthesia, but was largely devoted to the discussion of the advantages of anaesthesia produced by ether, chloroform and nitrous oxide gas. The essayist, as well as some of his friends in the dental profession, seemed to consider both chloroform and ether anaesthesia very safe, and some of the dentists even admitted hav-

ing no hesitancy in giving anaesthesia to patients who had the appearance of being in health, though the condition of the patient was not determined by physical examination. The members of the medical profession, and particularly the surgeons present, were very decided in their opinions that both chloroform and ether anaesthesia is attended with danger, and that this danger is greatly increased with an inexperienced anaesthetist, as well as poor physical condition of the patient. They argued that a general anaesthetic should always be administered by an experienced anaesthetist, and if possible, by one who is a specialist in the work. It was also generally admitted by the physicians and surgeons present that ether is by far the safest anaesthetic, all things being equal. The dentists also received a very rude shock from the decided difference of opinion expressed by the surgeons present as to the danger of using strong solutions of cocaine in the mouth, as practiced by the majority of the dentists. It was argued that the absorption by the mucous membrane of the mouth is very rapid, and that not a few individuals are peculiarly susceptible to the depressing influences of this drug, and that there are very many instances on record of fatal results following the use of even a very limited amount of a weak solution of cocaine.

On the whole the joint meeting was a very interesting and profitable one, and it is expected that the two societies will have joint sessions occasionally in the future.

THE INDIANA STATE MEDICAL SOCIETY.

The fifty-second annual session of the Indiana State Medical Society was held at South Bend on May 15, 16 and 17, 1901. The Society is to be congratulated in having selected South Bend as a meeting place this year, for the 1901 meeting may be said to have been one of the best in the history of the Society.

The arrangements for the meeting were admirably taken care of by the local medical profession. The general headquarters were located at the commodious and beautiful Oliver Hotel, where nearly all of the members and visitors were comfortably cared for. The general sessions of the Society were held at the Oliver Opera House, one and one-half blocks distant from the hotel. The exhibitors' hall, while small, was completely occupied by representatives from the various manufacturing chemists and physicians' supply houses, and though only separated from the adjoining

room, where the general sessions were held, by a hall, was yet sufficiently removed to prevent the noise from disturbing the sessions of the Society.

The first evening was devoted to a social feature, the members and invited guests of the Society being given complimentary tickets to a comic opera at the Oliver Opera House. The second evening's entertainment was held at the Studebaker Opera House, and was devoted to the customary president's address, by President G. W. McCaskey, and an address by invitation, by Dr. John A. Wyeth, of New York City.

The wives of the physicians of South Bend formed a committee on arrangements to care for the visiting ladies, and they did their work exceedingly well. The program, consisting of carriage drives, receptions, musicals, lawn fetes and theatre parties, furnished sufficient entertainment to keep the ladies busy throughout the entire three days, and gave them a feeling that the visit at South Bend had been a particularly pleasing one.

Both the members of the Society and the ladies, upon registering, were given numerous beautifully engraved invitations and programs covering the functions for all of the sessions, and a handsome society button which, when worn, acted as a card of introduction to the citizens of South Bend, who were ready to extend a cordial welcome. The Indiana Street Railway presented the members and visitors with a special badge, which entitled all those who wore it to free transportation over their lines within the city limits. The privileges of the Commercial Athletic Club and of the Indiana Club were extended to the members and ladies during the convention, and the St. Joseph County Medical Society tendered a beautiful reception and dance at the Oliver Hotel after the evening session of the second day. The latter function was one of the great social features of the meeting, and brought together the members of the Society, with their wives and sweethearts, and a very large number of the prominent society people of South Bend, who had been especially invited.

One of the entertainment features accorded the ladies, but taken advantage of by many of the gentlemen as well, was a carriage drive to Notre Dame University and St. Mary's Academy. At the latter institution a specially prepared musical program was given for the benefit of the visitors. The visit to both these noted institutions of learning, with their beautiful and picturesque

grounds, and numerous large and well equipped buildings, was a treat to those who accepted the invitation.

The attendance at the South Bend meeting was not equal to that of two or three previous meetings, though the registration book showed nearly 300 names, which speak well for the meeting when we consider that the attendance was to a large extent confined to physicians residing in the northern half of the state. What was lacking in numbers, however, was made up in enthusiasm, and those who remained away from the meeting have probably already had occasion to regret not having been present.

The nominating committee met at the Oliver House on the morning of the second day and elected the following officers for the ensuing year: President, Dr. A. W. Brayton, Indianapolis; Vice President, Dr. J. B. Berteling, South Bend; Secretary, Dr. F. C. Heath, Indianapolis; Assistant Secretary, Dr. W. H. Gilbert, Evansville; Treasurer, Dr. Albert E. Bulson, Jr., Fort Wayne.

At the general session of the Society on the morning of the second day it was unanimously decided that the next meeting be held in Evansville in May, 1902.

An appropriation of \$300 was made to cover the expenses of the pathological exhibit of the Indiana State Medical Society at the South Bend meeting, and at the St. Paul meeting of the American Medical Association.

On motion of Dr. Bulson, the new President, Dr. Brayton, was made chairman of the committee on publication, a position that he has so acceptably filled for many years, and a position which the Society thought it impossible to fill as satisfactorily as by the appointment of Dr. Brayton to the position by the Society.

At the last session, on the third day, it was also decided, by unanimous vote, that the members of the Society who discuss papers are to be favored with a carbon copy of their remarks as taken by the stenographer, with the privilege of revising and correcting the same before being published in the transactions.

The scientific program was an interesting one and very fully carried out. Unfortunately we were unable to obtain an abstract of either the papers or the discussions, but expect to publish in full some of the more important of the papers before the same are "buried" in the transactions of the Society. The complete program of the Society is as follows:

OPENING SESSION.

First Day.

Wednesday, May 15.

1:00 P. M.

Call to order by President G. W. McCaskey, Fort Wayne.

Invocation.....Rev. E. P. Bennett, South Bend

Addresses of Welcome by Hon. Schuyler Colfax, Mayor of South Bend, and Dr. H. T. Montgomery, South Bend.

Roll Call.

Report of Secretary.....F. C. Heath, Indianapolis

Report of Treasurer.....A. E. Bulson, Jr., Fort Wayne

Report of Committee on Arrangements, J. B. Berteling, South Bend

Report of Committee on Necrology.....G. W. Kemper, Muncie

Report of Committee on Publication, A. W. Brayton, Indianapolis

PAPERS.

1. Symposium on Diphtheria.

Causation.....J. B. Fattic, Anderson

Diagnosis.....L. P. Drayer, Fort Wayne

Treatment.....F. M. Sawyer, South Bend

Quarantine and Disinfection.....J. W. Hill, South Bend

Discussion opened by E. C. Davidson, Lafayette.

2. Pathology Diagnosis and Treatment of Pneumonia.....

.....J. C. Fleming, Elkhart

Discussion opened by A. P. Buchman, Fort Wayne.

3. Dysmenorrhoea.....L. H. Dunning, Indianapolis

Discussion opened by Jos. Weinstein, Terre Haute.

4. Dermoid Cyst of Testicle with Specimen.....

.....C. H. English, Fort Wayne

Discussion opened by S. L. Ensminger, Crawfordsville.

5. Inguinal Hernia.....David Ross, Indianapolis

Discussion opened by Samuel Kennedy, Shelbyville.

EVENING.

First Day.

Wednesday, May 15.

Auditorium, 8 O'clock.

The New Comic Opera, "Miss Storm," under the management of the Country Club, complimentary to the Members of the State Medical Society and their wives by the St.

Joseph County Medical Society.

MORNING SESSION.

Second Day.

Thursday, May 16.

8:30 O'clock.

Report of Committee on Ethics....K. K. Wheelock, Fort Wayne
Report of Finance Committee.....Peter Drayer, Hartford City
Report of Committee on Medical Legislation.....

.....W. N. Wishard, Indianapolis
Report of Committee on Pathology.....F. B. Wynn, Indianapolis
Miscellaneous Business.

Committee on Nominations will meet in Reading Room at the
Oliver.

PAPERS.

1. Tuberculosis J. H. Carson, Brazil
What Shall We Do With Our Consumptives?.....
..... W. J. Fairfield, Anderson
Discussion opened by Paul Barcus, Crawfordsville.
2. Dry Surgery E. Walker, Evansville
Discussion opened by Jos. Eastman, Indianapolis.
3. Nephritis G. W. Finley, Brazil
Interstitial Nephritis—Report of a Case.....
..... B. Van Sweringen, Fort Wayne
Discussion opened by James Wilson, Wabash.
4. Surgery of the Mammary Gland
..... W. M. Wright, Indianapolis
Discussion opened by F. C. Banker, Columbus.
5. Exophthalmic Goitre B. T. Hunt, Winchester
Discussion opened by A. E. Bulson, Fort Wayne.
6. Syncytium Malignum.....Walker Schell, Terre Haute
Discussion opened by Geo. H. Grant, Richmond.
7. The Present Status of the Treatment of Prostatic Hy-
pertrophy W. N. Wishard, Indianapolis
Discussion opened by C. E. Barnett, Fort Wayne.
8. A Case of Hystero-Epilepsy in which the climax was
marked by Hemorrhages from the intact External
Auditory Canal.....K. K. Wheelock, Fort Wayne
Discussion opened by D. W. Stevenson, Richmond.
9. Premedical Education Stanley Coulter, Lafayette
Discussion opened by Austin O'Malley, Notre Dame.

AFTERNOON SESSION.

Second Day.

Thursday, May 16.

1:30 O'clock.

1. Symposium on Puerpural Infection.
 - Causation Walker Schell, Terre Haute
 - Symptomatology A. M. Hayden, Evansville
 - Treatment D. J. Loring, Valparaiso
 - The General Practitioner in Puerpural Septicæmia
 - H. B. Boyd, Cambridge City
 - Discussion opened by J. T. Scott, Indianapolis.
2. What Constitutes "True Conservatism in the Treatment of Appendicitis" Miles F. Porter, Fort Wayne
 - Discussion opened by T. B. Noble, Indianapolis.
3. Medullary Narcosis C. Trueblood, Anderson
 - Discussion opened by L. J. Willien, Terre Haute.
4. Report of a Successful Operation for Pistol Shot Perforation of the Intestine.....J. C. Sexton, Rushville
 - Discussion opened by G. W. H. Kemper, Muncie.
5. Malaria in the Light of Recent Investigation.....
 - Chas. S. Bond, Richmond
 - Discussion opened by F. B. Wynn, Indianapolis.
6. The Gonococcus and Its Toxin..J. R. Eastman, Indianapolis
 - Discussion opened by Chas. Stoltz, South Bend.
7. Malignant Disease of the Skin
 - W. T. S. Dodds, Indianapolis
 - Discussion opened by A. W. Brayton, Indianapolis.
8. Useful Bacteria Severance Burrage, Lafayette
 - Discussion opened by W. H. Butler, Columbus.
9. Abortion T. B. Noble, Indianapolis
 - Discussion opened by R. B. Wetherell, Lafayette.
10. Prenatal Culture—A Factor in the Creation of Personal Traits and Talents.....E. J. McOscar, Fort Wayne
 - Discussion opened by B. H. Perce, Anderson.
11. Twins Hugh A. Cowing, Muncie
 - Discussion opened by Henry Gers, Washington.
12. The Etiology of Strabismus and Recent Methods of Treatment T. C. Hood, Indianapolis
 - Discussion opened by W. C. Eichelberger, Terre Haute.

EVENING SESSION.

Second Day.

Thursday, May 16.

Oliver Opera House,
8 O'clock Sharp.

President's Address—Physiology the Basis of Clinical Medicine:
A Plea for Scientific Methods.

Address—The Making of a Doctor
..... John A. Wyeth, New York City
Reception at the Oliver.

MORNING SESSION.

Third Day.

Friday, May 17.

8:30 O'clock.

Report of Committee on State Hygiene and State Medicine...
..... J. N. Hurty, Indianapolis
Report of Committee Rush Monument Fund
..... M. F. Porter, Fort Wayne
Report of Committee on Inebriety H. J. Hall, Franklin
Miscellaneous Business.

PAPERS.

1. Diagnosis and Treatment of Typhoid Fever
..... N. W. Cady, Logansport
A Plea for Drainage in Typhoid Fever
..... F. P. Nourse, Anderson
Discussion opened by W. H. Stemm, Mt. Vernon.
2. Ambulatory Treatment of Fractures
..... J. H. Cannon, South Bend
Discussion opened by J. H. Oliver, Indianapolis.
3. Acute Enteritis in Childhood.....F. A. Tucker, Noblesville
Discussion opened by B. A. Rose, Linton.
4. Foreign Bodies in the Lungs With Reports of Cases..
..... Theo. Potter, Indianapolis
Discussion opened by M. G. Moore, Vincennes.
5. History, Etiology, Symptoms and Differential Diagno-
sis of La Grippe..... Maynard A. Austin, Anderson
La Grippe N. D. Gaddy, Seymour
Discussion opened by John W. Gray, Bloomfield.
6. Dermatitis Universalis F. P. Eastman, South Bend
Discussion opened by J. L. Gilbert, Kendallville.

7. Aneurism of the Vertebral Artery With Report of Case,
..... Isaac N. Trent, Muncie
Discussion opened by Allen Pierson, Spencer.
8. Some Relations of the Profession to Ear Disease.....
..... J. F. Barnhill, Indianapolis
Discussion opened by L. C. Cline, Indianapolis.
9. Diagnosis of Acute Peritonitis..H. O. Pantzer, Indianapolis
Discussion opened by W. H. Gilbert, Evansville.
10. Vulvo Vaginal Abscess.....J. F. Smith, Brazil
Discussion opened by C. K. Brunner, Greenfield.

AFTERNOON SESSION.

Third Day.

Friday, May 17.

1:30 O'clock.

PAPERS.

1. A Consideration of the Ureter..F. R. Charlton, Indianapolis
Discussion opened by W. R. Cravens, Bloomfield.
2. Electricity in Medicine F. C. Dilley, Brazil
Discussion opened by John Kolmer, Indianapolis.
3. The Present Status of Diagnosis of Cancer of the
Stomach A. B. Graham, Indianapolis
Discussion opened by Geo. D. Kahlo, Indianapolis.
4. The Treatment of Pott's Disease..H. R. Allen, Indianapolis
Discussion opened by C. B. Stemen, Fort Wayne.
5. Subdural Hemorrhage L. B. Terrill, Anderson
Discussion opened by H. O. Statler, Goshen.
6. A Consideration of the Present Laws for Commitment
of Insane in Indiana.... W. B. Fletcher, Indianapolis
Discussion opened by Jos. G. Rogers, Logansport.
7. Dipsomania G. M. Leslie, Fort Wayne
Discussion opened by H. J. Hall, Franklin.
8. The Urine—A Clinical Study....S. P. Scherer, Indianapolis
Discussion opened by B. S. Hunt, Winchester.
9. Disease of the Upper Air Passages in Relation to Men-
tal Development L. F. Page, Indianapolis
Discussion opened by J. N. Hurty, Indianapolis.
- 10 Small-Pox C. W. Moore, Teegarden
Discussion opened by N. Hurty, Indianapolis.
11. Report of the Committee on Nominations.

Adjournment.

NOTES OF THE MEETING.

The members of the Society who missed a visit to Notre Dame and St. Mary's Academy might well regret not having taken the time to pay these educational institutions a visit.

The comic opera, under the management of the Country Club, in compliment to the members of the State Society by the St Joseph County Medical Society, was greatly enjoyed, and did credit to those who took part, who, we understand, were nearly all amateurs.

One of the best addresses of the entire meeting was that by Professor Coulter, of Purdue University, upon the subject "Pre-medical Education." It is unfortunate that so few listened to the address, but we are glad that the address will appear in revised form in the transactions.

The stereopticon exhibit of Dr. C. S. Bond, in connection with his paper upon "Malaria in the Light of Recent Investigation," was very instructive and greatly enjoyed. The views, made by Professor Dennis, of Earlham College, were beautiful and added much to the value of the paper.

The officers, local medical society, and citizens of South Bend came in for the usual vote of thanks, and the exhibitors, in token of their appreciation of the services by Dr. H. F. Montgomery, in providing for their comfort and convenience, presented that gentleman with a roll top desk.

One gain secured through migration of the State Society is the increased interest and respect which the laity of the various cities where the Society meets gains through contact with the profession of the state. A large body of scientific and gentlemanly men meeting in a city for such worthy purposes cannot help but act as an elevating influence upon the people.

The Treasurer, Dr. A. E. Bulson, Jr., of Fort Wayne, reported a balance in the treasury of \$279.51. He will have the pleasure of reporting next year that the committee on arrange-

ments, for the first time in the history of the society, turned over a balance of nearly \$75, after all the expenses of the South Bend meeting had been paid, from the funds received from exhibitors.

The committee on arrangements received no end of deserving praise for the complete and elegant manner in which the arrangements for the meeting were carried out. At no previous meeting has there been such an elegant display of engraved stationery as that seen in the invitations and programs. Everything else was equally good, and nothing was left undone that would add to the comfort or elegance of the entertainment.

We have just been informed that the St. Joseph County Medical Society presented Dr. J. B. Berteling, of South Bend, with a handsome leather chair as a testimony of appreciation of his indefatigable work and skill in making the local arrangements for the meeting of the Society. The local medical profession of South Bend was certainly warranted in remembering Dr. Berteling in a substantial manner, as the success of the meeting was largely due to his efforts.

One of the conspicuous members of the Society present at the South Bend meeting was Dr. W. B. Fletcher, of Indianapolis, who presented a very interesting and instructive paper upon the subject, "A Consideration of the Present Laws for the Commitment of the Insane." He advocated such a change in our laws as will make it possible for the commitment of the insane to be entirely in the hands of the medical profession, and that proper discrimination of cases likely to be benefited by medical treatment be made.

The report of the committee on inebriety, which has usually been so stale and uninteresting as to elicit no discussion, and usually resulted in the general migration of members when the report was read, took a different turn this year by the reporting of the introduction of a bill to the State Legislature for the establishment of a hospital for chronic inebriates in Indiana. They, however, reported that the bill, while ready for the Legislature, was never introduced, owing to the fact that the committee felt sure that it would be voted down with other bills demanding an expenditure of funds from the treasury of the state.

The fifteen-minutes rule regarding the length of papers was strictly enforced by President McCaskey and fortunately no extensions of time were asked for. We believe, however, that the number of papers should be limited to a less number, so that all may be more thoroughly discussed than were the papers presented at the South Bend meeting. In the hurry of getting through with the program upon scheduled time, many good papers do not receive the extended discussion that is warranted, and no one doubts the value of thorough discussion in bringing out new ideas.

The daily papers of South Bend gave a very full and complete account of the meeting. Among other things the *South Bend Times* said editorially:

"South Bend was delighted to be afforded the opportunity of entertaining the doctors, and, judging from their expressions, the doctors were delighted over the manner in which they were entertained during the past three days. It is but truth to say that our people would be more than glad to have the doctors come again. South Bend has a very high regard for men of profound knowledge and scientific research."

The ophthalmologists have been so accustomed to reading papers to empty benches that they have almost given up the idea of having papers referred to the State Society. It seems strange that many in general practice, who have but a meager knowledge of eye diseases, will refuse to listen to even the most interesting and instructive eye paper, no matter who the essayist may be. Perhaps the general physician thinks that as he is not competent to treat any eye diseases he will turn the work over to the ophthalmologist, who is better able to care for it; but even admitting this, it cannot be doubted that a general knowledge of eye diseases will better enable the physician to detect grave disorders and appreciate the necessity for early and competent care.

OFFICERS AND COMMITTEE OF INDIANA STATE MEDICAL SOCIETY FOR 1901-02.

Officers—A. W. Brayton, President, Indianapolis; J. B. Berteling, Vice-President, South Bend; F. C. Heath, Secretary, Indianapolis; W. H. Gilbert, Assistant Secretary, Evansville; A. E. Bulson, Jr., Treasurer, Fort Wayne.

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Publication: A. W. Brayton, Indianapolis; Theo. Potter, Indianapolis; F. C. Heath, Indianapolis; Allison Maxwell, Indianapolis; A. E. Bulson, Jr., Fort Wayne.

Credentials: A. J. Banker, Columbus; S. D. Beaver, Decatur; C. R. Long, Pierceton; M. F. Gerrish, Seymour; Allen Pierson, Spencer;

Necrology: G. W. Kemper, Muncie.

Medical Legislation: W. N. Wishard, Indianapolis; J. M. Wampler, Richmond; W. R. Cravens, Bloomfield; J. B. Berteling, South Bend; Samuel Kennedy, Shelbyville; W. G. Rice, Muncie; N. B. Aspinall, Plymouth; G. F. Keiper, Lafayette; J. C. O'Day, Montpelier; Paul J. Barcus, Crawfordsville; K. K. Wheelock, Fort Wayne.

Pathology: Frank B. Wynn, Indianapolis; L. P. Drayer, Fort Wayne; J. F. Scott, Indianapolis; L. J. Willien, Terre Haute; A. W. Bitting, Lafayette; Charles Trueblood, Anderson; Thomas B. Noble, Indianapolis; R. H. Ritter, Indianapolis.

Hygiene and State Medicine: J. N. Hurty, Indianapolis.

Inebriety: Albert E. Sterne, Indianapolis; H. J. Hall, Franklin; W. J. Fairfield, Anderson; Geo. R. Green, Muncie; C. K. Bruner, Greenfield; H. M. Lash, Indianapolis; C. B. Stemen, Fort Wayne; Chas. Stoltz, South Bend; R. B. Wetherell, Lafayette.

Place of meeting, Evansville, in May, 1902.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

THE X-RAY IN DIAGNOSIS.

An article upon this subject by Dr. Miles F. Porter, of Fort Wayne, appears in the May number of the *American Journal of Surgery and Gynecology*. Dr. Porter says; "An X-ray picture cannot lie, but it may be the cause of false conclusions through misrepresentation. To correctly interpret skiagraphs, one must know what they are. They are in reality photographs of shadows; therefore, whether the shadow is broader or narrower, longer or shorter, than the substance producing the shadow depends upon the relative positions of the tube, the plate and the part skia-graphed. A skiagraph of an oblique fracture taken with the tube in such a position that the rays fall upon the fracture plane at right angles will, in the absence of lateral displacement, fail to show the fracture.

"Another essential to the correct interpretation of skigraphic pictures is a thorough knowledge of anatomy. Epiphyseal carti-

lages throw no shadow, and normal epiphyseal attachments have been mistaken for fractures. The time at which the several epiphyses unite with their diaphyses must be remembered, and the influence of disease, especially rickets, upon this time. Other things being equal, the denser the tissue the more marked the shadow, and vice versa; hence, many of the tuberosities in childhood will appear abnormally short or small, thus leading possibly to the erroneous conclusion that a fracture exists.

"A knowledge of anatomy and pathology gained from reading and dissection, however thorough it may be, is not sufficient for one who would interpret correctly X-ray pictures. To be able to

do this one must study anatomy and pathology with the aid of the fluoroscope and skiagraphs. Also the character of the tube, length of exposure, the influence of mechanic and chemic effects, and many other things which space will not permit me to refer to in this paper, must be duly considered if we would avoid errors in interpreting either skiagraphs or fluoroscopic pictures.

"Granted that one is possessed of the essential knowledge and fully appreciates all sources of error, the X-rays are a valuable aid to diagnosis, and in some cases well nigh indispensable. The X-ray findings must be given due weight, but may seldom, if ever be regarded as absolute unless they are in harmony with other diagnostic findings.

"X-rays, then, cannot take the place of other diagnostic measures, but in connection with these measures their value has already been demonstrated, and will continue to increase, and finally reach their proper level when the points indicated above have been mastered by him who would use the rays for diagnostic purposes."

Instances are cited and pictures furnished to illustrate these points.

THE SOUTH BEND MEETING OF THE STATE MEDICAL SOCIETY.

The fifty-second annual meeting of the Indiana State Medical Society, held at South Bend on May 15, 16 and 17, has passed into history as one of the best from all points of view since the organization of the Society. South Bend, with its 35,000 inhabitants, numerous railroads, sumptuous hotel accommodations, well paved and well kept streets, beautiful residences, enterprising

people, and progressive and liberally hospitable medical profession, was an ideal place to hold the meeting. It is no more than just, however, to say that the success of the meeting largely depended upon the work of the chairman of the committee on arrangements, and to Dr. Berteling, ably assisted by the entire medical profession of South Bend is, therefore, due much of the credit. Aside from the cordial and universal hospitality exhibited by the local medical profession, the unfailing courtesy of the citizens of South Bend was also a marked feature. The wives of the physicians are also entitled to a large share of praise for the commendable manner in which they arranged for the entertainment and pleasure of the visiting ladies. It may well be said that nothing was left undone that would add to the comfort, pleasure or convenience of the Society, its members and visitors.

The scientific program presented was of unusual excellence, and was carried out without the irregularity and delay experienced at many former meetings. Dr. McCaskey made an excellent presiding officer, and insisted that the program be carried out with promptness and accuracy. His presidential address, delivered at the Studebaker Opera House on the second evening, was scholarly, scientific, and withal practical and interesting. The address by Dr. Wyeth was also a very creditable one, and was well received by the large audience present.

The three days' session, an innovation for the Society, proved satisfactory to the majority of the members, inasmuch as it did away with the necessity for two sections. It cannot be doubted that a large number of the general practitioners who desire to hear the papers in both the medical and surgical sections are greatly inconvenienced by being prevented from listening to two papers which conflict in time of presentation, and the sessions are more or less disturbed by the noise occasioned by members going back and forth from one section to the other.

Another omission and commendable feature of the South Bend meeting was the absence of junketing tours from the program, which heretofore have caused annoyance and taken many members from the scientific sessions of the Society. While it must be admitted that the members of the Society enjoy the social features offered by the local professions in the cities where the Society meets, it must be remembered that the Society meets for scientific work, and absolutely nothing should be allowed to interfere with the best work of the scientific sessions.

The ever-present exhibiter was in evidence at South Bend, but the committee on arrangements had very cleverly placed the exhibitors in a large room, which, while adjoining the general audience room, was yet sufficiently removed to prevent the usual noise from the exhibitors' room from disturbing the scientific sessions. The Society is also fortunate in receiving not only enough money from the sale of space to exhibitors to pay the entire expenses of the meeting, but to have a balance of nearly \$75 turned into the general treasury. As we have very frequently remarked, if the State Society has to *tolerate* exhibitors, there is no reason why we should not profit through the toleration, at least to the extent of having the expenses of the meeting paid from the revenues derived from the sale of space.

Our Evansville friends say that the meeting of next year will be fully equal to the South Bend meeting, and we believe that the profession of Evansville is equal to the task. We may add, however, that the South Bend meeting was one of the banner meetings, and a credit to not only the local profession of South Bend, but the medical fraternity of the State of Indiana. We hope to speak in as commendatory manner regarding the 1902 meeting at Evansville, and if the medical profession of that city lives up to its reputation we will be able to do so. A. E. B.

THE NEW PRESIDENT OF THE INDIANA STATE MEDICAL SOCIETY.

It is with a sense of keen pleasure that we announce the election of our friend and fellow laborer in the journalistic field, Dr. Alembert W. Brayton, of Indianapolis, to the presidency of the Indiana State Medical Society for the ensuing year. No medical man in the state has been a more faithful, conscientious and able worker in the interest of the State Medical Society than Dr. Brayton. For many years he has edited with rare tact and skill the transactions of the Society, and with his usual journalistic enterprise he has sat through the long and oftentimes monotonous sessions of the Society, taking notes to be used in his "write-up" of the meeting for the *Indiana Medical Journal*, of which he is the accomplished editor. This constant attendance has made him a conspicuous feature of each meeting, and his sentinel-like guardianship of the welfare of the Society has been frequently noted when he courteously, but forcibly, opposed some of the wild schemes

that erratic members have occasionally proposed. To his friends Dr. Brayton has always been loyal, yet not a few members of the medical profession who are fortunate in having his friendship have been made to feel the keen sting of both criticism and satire in the interest of right acting and right thinking as Dr. Brayton sees it in his plain, unpretentious, honest and ethical way. The Society has done justice to itself and to Dr. Brayton in his election to the Presidency for the ensuing year. Dr. Brayton will prove himself worthy of the position to which he has been honored, and the Society will have added another name to the long list of able men who have acted in the capacity of President of the Indiana State Medical Society.

A. E. B.

NEWS NOTES AND COMMENTS

DR. BUCHMAN'S ANNOUNCEMENT.—We have recently received the following announcement, which explains itself:

"Dr. A. P. Buchman respectfully announces that on and after June 1st, 1901, he will limit his practice to diseases of the digestive system and rectal diseases."

THE DETROIT MEDICAL JOURNAL.—The first number of the *Detroit Medical Journal*, published by the J. F. Hartz Company, and edited by G. Archie Stockwell, has been received. The initial number is filled with a considerable amount of interesting, scientific reading matter, and if this is an evidence of future numbers, it promises success for the venture.

FORT WAYNE PHYSICIANS AT ST. PAUL.—The following physicians and surgeons of Fort Wayne will leave on Monday, June 3rd, for St. Paul to attend the annual meeting of the American Medical Association: Drs. M. F. Porter, G. L. Greenawalt, Maurice I. Rosenthal, E. J. McOscar, C. H. English, A. E. Bulson, Jr., G. W. McCaskey, G. B. M. Bower and Carl Schilling.

REMOVAL OF POWDER STAINS.—Owing to the near approach of the season for fireworks and the demand to have powder stains

and burns removed, it may not be amiss to refer to the plan of Dr. J. N. Rhodes, who states in *American Medicine* that he has removed, with success, powder stains from the face due to fire-crackers, etc., by means of the application of hydrogen peroxid in full strength. The patient also applies the remedy at home.

FIVE BOYS AT ONE BIRTH.—A remarkable birth is reported from St. Mary's Home, near Jefferson City, Mo., where Mrs. Henry Smith gave birth to five baby boys at one time. They are reported to be well and weigh a total of 30 pounds. Smith has been married less than seven years and is the father of sixteen children. Only one time has there been born a single baby. The others are two pair of twins, two pair of triplets, and the quintette.—*Philadelphia Med. Jour.*

ADHESIVE RUBBER DAM.—In the *Jour. of the Amer. Med. Assoc.* of May 11th, Dr. Fenton B. Turk attempts to prove that the use of rubber dam for the prevention of possible infection at the site of operation, as advocated by Dr. J. B. Murphy, is a practice advocated by him and that therefore Dr. Murphy should have given him credit for the same. In the *Journal* of May 18th, Dr. Murphy retaliates by saying that Dr. Turk has failed to distinguish between the aseptic *adhesive* rubber dam and the ordinary rubber dam not adhesive, the former advocated by Dr. Murphy and the latter by Dr. Turk.

A REMEDY FOR DIVISION OF FEES.—The *Cleveland Journal of Medicine* recommends as a remedy for the evil known as division of fees, that the medical societies throughout the country arrange a fee bill for medical cases on the basis of services rendered, according to the disease, its severity, complications, etc., and not upon the principle of the number of visits made. In the fee bill is to be inserted a provision requiring the payment by the patient of twenty-five per cent. in addition to the fee charged by the surgeon for sharing the responsibility of urging surgical intervention. It is argued that the patient and his friends should understand this agreement prior to the operation, and that the fee should be regulated in accordance with the ability of the patient to pay, the gravity of the case and the difficulties to be encountered in the operation.

RAT EXTERMINATION.—It is announced that one of the large manufacturing firms in Chicago is waging war upon rats by means of a virus made under the direction of the Pasteur Vaccine Company. The virus is mixed with food and placed in the haunts of rats. It produces a fatal disease, which spreads rapidly and retains its virulence for some time. The virus is harmless to other species of animal life and has been tested officially in France and in this country, and in the United States Marine Hospital in San Francisco, where the results of the test were endorsed by the Chief of the Marine Hospital service at Washington. As rats are great carriers of contagion of all kinds, and are unusually destructive and annoying to the residents of our large cities, it is to be hoped that this new virus for the extermination of rats may come into use in all rat-infected districts.

THE LIBRARY OF KINGS COUNTY MEDICAL SOCIETY OF NEW YORK.—We have recently been favored with both exterior and interior views of the new "Library of the Medical Society of the County of Kings," located on Bedford avenue, Brooklyn, N. Y. The building, which has recently been erected by the society, is an absolutely fire-proof structure, which in taste and equipment equals any library in the world. The library, containing over 30,000 volumes, 15,000 pamphlets and some 500 current medical periodicals, was thrown open to the public on May 19th of this year. The library especially solicits authors to donate a copy of each of their published writings, publishers to contribute a copy of their publications (new or old), and editors to furnish a current file of their journals, transactions, etc. The cost of transportation of donations of books, bound volumes, odd numbers of journals, pamphlets, reports, etc., is cheerfully assumed by the library if desired.

MARRIAGE LEGISLATION IN MINNESOTA.—A bill has recently been passed by the Minnesota Legislature which provides that no man or woman who is epileptic, imbecile, feeble-minded or afflicted with chronic insanity shall intermarry when the woman is under the age of 45 years, and that no person not thus afflicted shall marry any one unless under severe penalties. No official shall issue a marriage license to any applicant, unless in addition to the conditions heretofore required he shall be furnished with a certificate from a reputable physician or physicians of the counties in

which the applicant resides, certifying that on examination it has been found that there is, besides the patient's actual freedom from imbecilify and insanity, no such defect in parents, grandparents, brothers or sisters. Every such certificate must be filed in the office of the licensing official. No clergyman or other person authorized to solemnize marriages shall perform the marriage ceremony for any person not thus qualified by this law under severe penalties.

RESOLUTIONS ON DIVISION OF FEES.—The Chicago Medical Society has adopted the following:

“Resolved, That the offering or the giving of a commission or percentage of a fee by a consulting physician or operating surgeon, or the asking or receiving of such a fee or commission in any guise whatsoever by the physician referring the case, is dishonest, disreputable and unethical, unless such arrangement be made with the full knowledge of the patient.

“Resolved, That a violation of this resolution shall subject the offender to expulsion from the Society.”

The Physicians' Club, of Chicago, has unanimously passed the following:

“Resolved, That the Physicians' Club, of Chicago, most severely condemns the seeking for or receiving of a commission or part of a consultation or operation fee, as well as the offering or giving of a commission or a part of a fee, as practices highly dishonorable and detrimental to the best interests of the medical profession.”

ANOTHER VICTIM FOR DOWIE.—The daily papers of Chicago announce the arrest and subsequent release under \$10,000 bail of the notorious healer named Dowie, who is held responsible for the death of a parturient woman, who died in Chicago on May 1st from hemorrhage, after an illness of two or three days, during which time the only treatment employed was laying on of hands and prayer, both of which proved ineffective. Medical aid was persistently refused, and the woman, together with her infant child, died, the bodies being spirited away by a disciple of Dowieism. At the coroner's inquest competent medical testimony went to show that there was not the slightest doubt but that both the woman and child might have been saved had medical and surgical attention been given.

It is certainly gratifying to know that at last the people have

begun to come to their senses regarding the dangers of such fanataeism as that which prevails among the Dowieites, and that the case here cited calls for severe punishment. Dowie, the husband of the victim, and two other female Dowieites have been bound over to await the action of the grand jury, and it is fully expected that an indictment holding all the interested parties for the death of the woman and child will be issued. It is probable, however, that Dowie, with his pocketbook and the wonderful influence which money exerts, will be able to go free to continue his dangerous work. (Later; The prophecy came true. Dowie was released.)

COUGHS, THEIR SUPPRESSION AND CURE. — Dr. Louis DeLorne, in the *Interstate Medical Journal*, says that the treatment of coughs in general has always been unsatisfactory, owing to the difficulty in finding a good remedy to relieve the distress in many phases of chest troubles, and particularly in coughs of bronchitis, pneumonia and phthisis. Nearly all cough remedies have some unpleasant therapeutic effect following their use, and this is particularly the case in those remedies containing either codeine or morphine.

To supply the need of something to replace the various unsatisfactory remedies now on the market, and yet to supply something that is reliable and safe for the treatment of the sympathetic cough of pregnancy, the incessant cough of tuberculosis, the paroxysmal coughs which rob the patient of rest and sleep, Dr. DeLorne recommends the use of glyco-heroin (Smith), which is a composition containing 1-16 grain heroin, 3 grains ammonium hypophosphite, 1 grain hyoscyamus, 3 1-2 grains of white pine bark, 1-3 grain of balsam tolu, and glycerine sufficient to make one dram. The administration of this remedy is not attended with derangement of the stomach or any unpleasant or deleterious effect. The remedy has been tried with success in a large number of cases of cough due to tuberculosis, acute bronchitis, chronic bronchitis, pulmonary emphysema, bronchial asthma and acute pneumonia.

The remedy, among other effects, produces a reduction of temperature, is devoid of hypnotic effect, has no tendency to produce a habit, does not weaken the respiratory apparatus, has no unpleasant or deleterious effect upon the heart, stomach or bowels. A number of cases are cited to substantiate the claims.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

THE RESPIRATORY MOVEMENTS OF THE PRECORDIAL AREA IN HEALTH AND IN DISEASE.—Aikan discusses the significance of the respiratory movements of the precordial area in health and in disease. In health the left intercostal space rises and falls at its sternal end, during the respiratory act, to a lesser degree than the right. The respiratory movement does not extend beyond the junction of the cartilage of the rib. In children the restricted respiratory movement extends as high as the second intercostal space, and in adults downwards to the fourth intercostal space. In order to observe this sign the patient should lie flat on his back with his arms along his sides. Deformity of the chest obscures this sign. In acute pericarditis this area of stillness is increased in extent, and the decrease in the respiratory movement is pronounced. This sign precedes the stethoscopic manifestations of pericarditis by a period varying from one to four days. In endocarditis with compensatory hypertrophy of dilatation, the precordial stillness is wider than normal.—*Phil. Med. Jour.*

THE HEPATIC SYSTEM AND CONSTIPATION.—The *Edinburgh Medical Journal* is now publishing a series of articles entitled "The Rational and Comprehensive Study of the Hepatic System," by Frederick T. Roberts, M. D., F. R. C. P., Senior Physician to University College Hospital, from which we quote the following paragraph:

Another aspect of the aetiological relationship of the alimentary canal to the hepatic system, which, in my opinion, is of essential importance, and to which I desire to draw particular atten-

tion, is the injury that may result from pronounced chronic or habitual constipation, or, in other words, from persistent neglect of a healthy action of the bowels. Now, a frequent tendency, both with the medical faculty and the laity, is undoubtedly to refer constipation entirely to some interference with the biliary function, and consequently the common demand, which is carried out in practice, is for some drug or combination to "act upon the liver," so that the increased flow of the bile may overcome the difficulty of the bowel. The idea never seems to suggest itself that it may be the other way about, and that the hepatic functions may be materially helped by getting rid of accumulated faeces in some other way, and by taking pains to prevent constipation, and see that there is a satisfactory daily alvine evacuation. Moreover, neglect of the bowels is undoubtedly a frequent and potent factor in the production of gall stones, and they demand particular attention from this point of view. It is an acknowledged physiological fact that a large amount of bile is being constantly reabsorbed from the intestines, and if the secretion is pent up by accumulated faeces, such absorption must necessarily take place in an excessive degree, with untoward consequences. Further, by keeping the bowels as free as possible the discharge of bile through the ducts into the duodenum is likely to be indirectly promoted, and any tendency to accumulation in these ducts, the liver, or the gall bladder, will thus be materially obviated.

It will suffice to mention, in further illustration of the aetiological relations of the intestines to the hepatic system, those very exceptional cases in which an intestinal worm gains access into the common bile duct, thus blocking it, and giving rise to obstructive jaundice.—*Review of Reviews.*

THE DIETETIC VALUE OF SUGAR.—The Anglo-Saxon may be distinguished as the sugar-eating race. The characteristics of that race are its energy, robustness and vigor, its pluck, and its power of endurance. The great feature in the metabolism of all carbohydrates is that they are completely oxidized in the body into water and carbonic acid, without waste, and without residue. Sugar is not acted upon by the saliva, except in so far as it may be dissolved or further diluted. In the stomach it is partly changed into dextrose by the gastric juice and, to a small extent, absorbed. The greater part, however, passes into the small intestine, where it is rapidly changed into grape sugar dextrose. It is then quickly

absorbed into the portal blood and is carried by it to the liver, where it is stored as glycogen to the hepatic cells. This glycogen is again turned into grape sugar when it is required for use and in this form undergoes oxidation in the tissues, splitting up into CO_2 and H_2O , liberating kinetic energy in the process. This kinetic energy may be utilized either for the production of heat or for mechanical work. Sugar is easily digested and absorbed. It is readily stored up as glycogen, forming a reserve of force-producing material. It is, in this form, readily available when required. It becomes completely oxidized without waste and without residue. It can, under certain circumstances, be converted into fat, in which form, also, it can be stored up in the body and so be capable of producing heat and force in the future. It is also what is called a proteid-sparing food, that is, it will save the wear and tear of the proteids of the body, being used up instead of these substances. Then, again, it is pleasant to take, and thus acts as a relish, stimulating the activity of the digestive processes. So, it would seem that the theoretical considerations derived from a study of the chemical and physiological properties of sugar, the experiments upon animals and upon men in the laboratories, the general instinct of mankind leading it to increase its consumption of sugar wherever it can, the experience of different races in widely different climates, the energy and vitality of the great sugar-eating races, the experience of athletes, and lastly, the experiments conducted upon a large scale in the German army, all point to the same conclusion—all tend to show the great value of sugar as an article of diet. If sugar is such a valuable food it is likely to be of value in the numerous cases in which nutrition is at fault, such as simple marasmus, phthisis, and the condition of malnutrition in those who inherit a predisposition to phthisis. For growing boys and girls it is also needed, and we often find their nutrition suffering owing to a popular prejudice against sugar. For the aged and for convalescents it is probably one of the best of foods. Those who are gouty and fat must avoid sugar, but those who are gouty and thin, while their nitrogenous food, especially red meat, soups, etc., must be strictly limited, may use the sugars and starches without much fear.—*Phil. Med. Jour.*

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M. M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

DIAGNOSIS OF CANCER OF UTERUS.—Thomas Cullen, in his address before the Am. Surg. Asso. on "Early Signs of Carcinoma Uteri," said that cells with large nuclei and abundant chromatin in diseased tissue are pathognomonic of cancer.

TO PRESERVE RUBBER.—The best method of preserving rubber articles is to keep them in a 1 per cent. solution of formaldehyde or zinc chloride, or in a concentrated solution of boric acid. Red rubber keeps better than black.—*Merck's Report*.

TRANSPOSITION OF VISCERA.—W. M. Weaver, of Hartford, Conn., reports (*American Medicine*, May 25) the case of a child which died on the 13th day after birth, in which there was found, upon post-mortem examination, an almost complete transposition of the viscera.

VAGINAL OPERATION.—In his article on the above subject, (*Am. Medicine*, May 4), Byor says it is well always to remove both tubes in cases of pyosalpinx, even though one may appear healthy. The chances of functional utility of the tube left are too slight to be considered.

CHLORETONE IN DUSTING POWDER.—According to E. Hollingsworth Siter, (*Ther. Gaz.*, March 15, 1901), chloretone may be used in connection with almost any dusting powder in painful granulating wounds. It does not hasten granulation, but mitigates or entirely allays pain in the majority of cases.

TREATMENT OF ISCHIO RECTAL ABSCESS.—Dr. Seneca D. Powell, of New York, has a very radical plan of treatment of ischio-rectal abscess. Under complete anaesthesia he opens widely and then thoroughly cures every part of the abscess-wall; next washing the cavity with pure carbolic acid, he neutralizes the excess of

acid with alcohol, and finally dries the surfaces carefully and packs loosely with 2 per cent. carbolic gauze. Ideal results have thus far been obtained in every case submitted to this treatment.—*Am. Jour. Surg. and Gynecol.*, May, 1901.

MIGRAINE.—W. Whitehead, Consulting Surgeon Manchester Royal Infirmary, says he has not failed in twenty-five years to cure the most inveterate case of migraine by the introduction of a seton through the skin at the back of the neck. The skin is pinched up and transfixed with a knife, a probe with an eye passed with the knife in situ as a guide, through the eye in the probe a piece of ordinary tape passed and pulled through the wound by withdrawal of the probe. The patient is directed to move the tape from side to side each day. It should be worn for three months, and if the trouble recurs after withdrawal it should be reintroduced. The ends of the tape, which should be about 8 to 10 inches long, are tied to prevent its being accidentally withdrawn.

FORMALIN IN METRORRHAGIA.—Gerstenberg (*Cent. fur. Gyn.* No. 34) discusses the value of intrauterine applications of formol, as advocated by Menge, and reports two cases in which good results were obtained. The undiluted formalin (40 per cent. formaldehyde solution) is applied to the interior of the uterus with a Playfair applicator, which is rapidly withdrawn after touching every portion of the uterine mucous membrane. The disinfected vagina is filled with cotton tampons, which are removed after twenty-four hours. Gerstenberg uses this treatment in his office, but insists that his patients after reaching home remain in bed for at least two days. The cases treated comprised climacteric bleeding, menorrhagia, endometritis, subinvolution, post partum hemorrhage, etc. The results were always most favorable, and subsequent stenosis was never observed.—*Med. and Surg. Monitor*.

(We think intrauterine medication should seldom be resorted to in the physician's office. Certainly it would be better never to apply so severe a remedy as undiluted formalin save at the patient's home or in the hospital, where she can remain quiet in bed for one or two days after the application.—Ed.)

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, and the Allen County Orphan Asylum
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

TREATMENT OF GONORRHEAL OPHTHALMIA. — A 5 per cent. solution of protargol is recommended by the *Journal of the American Medical Association* as being one of the best remedies for the treatment of gonorrheal ophthalmia. Two or three drops of the solution are instilled into the effected eye twice daily after cleansing. The treatment is unirritating.

REMOVAL OF THE UVULA WITH A SNARE.—Dr. E. Fletcher Ingalls, at a recent meeting of the Chicago Laryngological Society, said that he considered the removal of the uvula with the ordinary polypus snare by far the best method in the treatment of elongated uvula. In this manner the exposure of the muscular tissue and ensuing soreness, as a result of the retraction of the mucous membrane after uvulotomy with the scissors, may be avoided.

A RULE FOR COMBINING CROSSED CYLINDERS. — Dr. H. S. Perse, in the *Jour. of the Am. Med. Assoc.* of April 27th, gives the following formula for transposing crossed cylinders into a spherocylinder. "The cylinder is the sum of the two cylinders with the sign and axis of one of the cylinders. The sphere is the strength of the other cylinder with *its* sign."

The formula has also been published in the 1901 revised edition of "Retinoscopy," by Dr. Thorington.

ANESTHESIA OF THE EAR DRUM.—Dr. E. C. Ellett, in a letter to the *Jour. of the Am. Med. Assoc.*, published April 27th, says that a mixture containing equal parts of cocain, carbolic acid and menthol is a combination of local anesthetics which he has found to act admirably in producing an anesthesia of the drum, permitting painless paracentesis. After cleansing and drying the canal the mixture should be applied with a cotton-dipped applicator

directly to that portion of the drum which it is desired to incise. In a moment the surface becomes white, and this is convenient in that it becomes easier to confine your incision to anesthetized parts.

THE RULE FOR THYROID TREATMENT IN GRAVES' DISEASE.—O. T. Osborne, in the *Jour. of the Amer. Med. Assoc.* of March 23rd, says that only certain cases of Grave's disease are benefited by thyroid extract, and in the continuation of this form of treatment the following rule is an excellent one to follow: "If there is cerebral excitement, palpitation and progressive loss of weight, thyroid treatment is contraindicated; if the patient is sleepy, apathetic, palpitation is not bad, has no headache and is putting on weight, thyroid treatment will probably benefit the case."

OPTIC NEURITIS AND THYROID TREATMENT.—*The Medical Press and Circular*, for March 6th, (*Jour. Amer. Assoc.*), states that Dr. Coppez, of Brussels, reports the cases of five patients, four of whom were women, in which prolonged thyroid treatment for obesity produced well marked optic neuritis, occurring several months after the beginning of the treatment and then progressing rapidly, vision being reduced about 1-10 in the course of a few weeks. In some of the cases suspension of the administration sufficed to relieve the condition, and its connection with the treatment therefore seems obvious. The writer remarks that henceforth the inquiry as to the use of thyroid treatment will be in order in cases of optic neuritis of obscure etiology.

THE MANAGEMENT OF NASAL CATARRH.—Dr. C. P. Grayson, in the *Therapeutic Gazette* of February 15th, has an interesting article upon the local and constitutional treatment to be adopted in the very various manifestations which group themselves under the general title of nasal catarrh. The author begins with the consideration of acute catarrhal rhinitis, in which he advocates the eliminative treatment, and deprecates the routine use of the so-called "rhinitis" and "coryza" tablets. For a local application he uses alkaline sprays and a combination of extract of suprarenal capsule with chloretone. In the subsiding stages he advocates the use of Boulton's solution. In chronic hypertrophic conditions he uses the various iodine solutions. In atrophic conditions he recom-

mends thorough cleansing, followed by the application of iodine or various other stimulants.—*Jour. Eye, Ear and Throat Diseases.*

PROTARGOL, IN NOSE AND THROAT DISEASES.—Dr. W. F. Skillman, in the *Journal of Eye, Ear and Throat Diseases*, says that although protargol has been used in ophthalmic and genito-urinary practice, it has not been recommended for use in the treatment of diseases of the nose and throat, owing to the fact that no one seems to have employed the drug in that manner. He, however, makes the following observations as to the value of the drug after having used it to a considerable extent in private and hospital practice.

In acute rhinitis a 2 per cent. solution of protargol sprayed into the nose is often followed by brilliant results. In children a solution of this strength is often found to be too irritating and must be diluted.

In recurrent epistaxis without apparent cause a 2 per cent. solution of protargol sprayed into the nose once per day is recommended. In chronic rhinitis the results from this drug were not marked, but in chronic rhino-pharyngitis and in chronic pharyngitis the results were as good, if not better, than with other forms of treatment, and the applications with a spray were by no means so disagreeable. In the treatment of these affections the strength of the solution is gradually increased from 1 to 10 per cent., the mucous membrane being first thoroughly cleansed before making the protargol applications.

In acute laryngitis protargol does not seem to produce as beneficial results as other forms of treatment, though in the treatment of chronic laryngitis protargol has been found very satisfactory. In the treatment of the latter affection the protargol solution is gradually increased from 2 to 10 per cent. (We do not believe that the use of protargol in any strength will prove beneficial in the treatment of intra-nasal inflammations but in the treatment of chronic congestions of the pharynx and larynx a fifty per cent. solution of protargol has proven exceptionally effective and much less irritating than silver nitrate. In less strength than fifty per cent., however, the remedy produces no decided beneficial results.—Ed.)

THE ABSORPTION OF EXUDATES WITHIN THE EYEBALL.—In an article upon this subject, in the *Jour. of the Amer. Med. Assoc.*,

Dr. Randolph Brunson says that to promote the absorption of exudates within the eyeball it is absurd to expect results from small doses of potassium iodide. He says that at the Hot Springs, in conjunction with the hot baths, it is not an uncommon thing to give patients as much as 200 drops of a saturated solution of potassium iodide three times daily, and that it is possible without

the baths to aid in the elimination by taking from one to two drams of potassium iodide three times daily without any ill effects, and the rapid disappearance of the exudates. Dr. Brunson says that it has been his experience to see exudates disappear time after time in large doses, when the small doses had no appreciable effect whatsoever. He also believes the mercurial inunctions, even in those instances in which a specific history is not obtained, will prove beneficial prior to the administration of iodides. One dram of the ointment is to be rubbed into the skin each day, and this is to be continued until the point of ptyalism is reached.

Salicylate of sodium is another remedy of marked virtue in the absorption of exudates, especially in cases of rheumatic origin or uric acid diathesis. Thirty grains well diluted in water every four hours well in many cases, and if one of the digestives ferments, such as pepsin, is given along with the salicylate, the distressing stomach disturbance often seen after large and continued doses of this drug will be greatly obviated.

Diaphoretics promote the absorption of exudates, and in this form of treatment pilocarpin certainly stands at the head. Dr. Brunson advises that in this treatment the patient abstain as far as possible from liquids, not only during the time that the sweating process is in operation, but for hours afterwards. A dose of about one-fourth grain of pilocarpin should be given to a patient who has already been placed in bed with woolen blankets under and over him to prolong the sweating process.

PROLONGED INTUBATION.—Dr. Edwin Rosenthal, in *American Medicine* of May 4th, says that cases frequently arise in which an intubated patient requires the wearing of a tube for a prolonged period of time, and he mentions a case occurring at the Philadelphia Municipal Hospital, in which the patient required a tube eleven months and died at last from suffocation. He reports a case in his own practice in which stenosis occurred each time an attempt was made to remove the tube, and not until the end of

thirty-six days was it possible to permanently remove the tube. He concludes by saying that all cases requiring a tube longer than five or six days must be classified as cases of prolonged intubation. The treatment consists in large doses of strychnia, and the constant intubation or extubation, daily or every second day, of progressively smaller tubes until the case no longer requires it.

PURULENT OTITIS.—In an article upon this subject by Dr. H. Gradle, in the *Journal of the American Medical Association*, of March 30th, early paracentesis is advocated not only to afford relief to the patient, but if possible to prevent the effusion in the middle ear from becoming purulent. It must be remembered that the discharge is serous at first, and only becomes purulent later on, those due to streptococcus infection perhaps being exceptions to the rule. When proper treatment is begun during the early, or stage of serous discharge, purulency may be prevented and the disease will then pursue the mildest and shortest course possible. Dr. Gradle says that he has never seen mastoiditis supervene in a case in which the discharge remained serous and complications rarely occur.

Among the most important of the causes predisposing to suppurative otitis is the enlarged pharyngeal tonsil, or adenoid vegetations. In view of this fact Dr. Gradle says that it is important that this morbid condition be recognized early and given the proper surgical attention.

BOOK REVIEWS.

INTERNATIONAL CLINICS.—A Quarterly of Clinical Lectures and especially prepared articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Paediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by Henry W. Catthell, A. M., M. D., Philadelphia, U. S. A. With the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia; with regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume I. Eleventh Series, 1901. Philadelphia, J. B. Lippincott Company. 1901.

Not the least valuable part of the volume before us is that included under the head of "Other Topics of Interest," on the title page, as above given. Under this head would come W. H. Walmshy's article on "Some Practical Methods in Photomicrography," which occupies twenty-two pages; and the review of the year's progress in medicine and surgery by N. J. Blackwood which covers 108 pages. We know of no way by which one could come nearer reaping the advantages of a post-graduate course without attending a post-graduate school than by reading the International Clinics. Through previously published reviews of the preceding series our readers are sufficiently well acquainted with the general scope and character of the work. It is therefore only necessary to say that the present volume loses nothing by comparison with those which have preceded it. PORTER.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

PUERPERAL SEPSIS—A PLEA FOR GREATER ACCURACY IN DIAGNOSIS, TO THE END THAT THE TREATMENT MAY BE MORE RATIONAL AND EFFECTIVE.*

By MILES F. PORTER, M. D.

Professor of Surgery and Gynecology in the Fort Wayne College of Medicine.

The terms puerperal sepsis, puerperal infection, etc., like the mantle of charity, cover a multitude of pathologic conditions.

How frequently do we see a paper entitled—Hysterectomy for Puerperal Sepsis, or—The Use of the Curette in Puerperal Infection. I am aware of the fact that in writing this paper I am laying myself open to the charge of being presumptuous, but I am confident that a little thought will convince the members of this association that there has been an unwarrantable looseness in the use of terms by authors writing upon puerperal infections of various kinds, and am equally confident that you will agree with me in my belief that this looseness in the use of terms is conducive to improper methods of treatment. If a gynecologist of experience advises vaginal hysterectomy in "puerperal sepsis," or "curettage in

Presented before the Southern Surgical and Gynecological Association.

puerperal infection," it does not follow that he will use either of these measures save in properly selected cases; but what will be the effect of such teaching on the general practitioner, or upon the beginner in gynecology? Would any intelligent surgeon advocate the removal of the adnexia for puerperal sepsis? Yet the absurdity of such a proposition differs in degree only from "hysterectomy for puerperal sepsis." Within the past week I read an article in which uterine curettage was advocated in all cases of "puerperal infection" as soon as the symptoms manifested themselves. No evidence need be adduced by me to prove that such a procedure carried out in all cases of puerperal sepsis would be productive of much harm. To recommend uterine curettage or hysterectomy in the majority of cases of puerperal infection is equivalent to saying that the source of infection in the majority of these cases is the uterus. There is plenty of evidence to prove that this is far from the truth. On the contrary there can be no question but that the infection atriæ in the majority of cases are to be found either in the cervix, or in the genital tract below that point. Especially is this true of primipara, hence the relatively large number of primipara, as compared with multipara, who suffer from puerperal infections. The terms "puerperal infection" and "puerperal sepsis" are continually being used to describe cases which differ as widely in pathology as does furunculosis from osteomyelitis.

These terms (puerperal sepsis and puerperal infection) indicate in part only the nature of these cases, and a half truth may be as harmful as a falsehood. They are convenient cloaks for ignorance, and convey no definite meaning. A diagnosis of "infection" is not sufficient. The character of the poison, the point or points at which it gained entrance, together with the pathologic lesions which it has produced, must be ascertained before scientific and rational treatment can be instituted. The fact should not be lost sight of that a lying-in woman is subject to infections other than those caused by the lying-in state—malaria and gastro-intestinal toxemias, for instance. Serious and even fatal infection may occur through cracked or abraded nipples. "Puerperal infection" or "puerperal sepsis" may manifest itself in either of the following pathologic conditions, or in a combination of two or more of them:

1. Progressive septicemia.
2. Pyemia (septic thrombo-phlebitis.)
3. Septic intoxication (sapremia).
4. Endometritis.
- 5.

Metritis. 6. Salpingitis. 7. Pyosalpinx. 8. Colpitis and vulvitis. 9. Peritonitis (general or local). 10. Cellulitis. 11. Ovarian abscess.

Strictly speaking, those infections which have their origin in the mammary gland or nipple as a result of child bearing, are puerperal infections. To say that a woman suffering from one of the above named conditions, or from a combination of two or more of them, has puerperal sepsis, is to tell only a part of the truth, and from a practical standpoint, a relatively unimportant part of it at that.

The successful treatment of a given pathologic condition is much the same in the puerperal as in the non-puerperal woman. The danger of some operations are, however, materially increased by the puerperal condition. Manipulations of the womb, such as are necessary in doing a hysterectomy, or a curettement, may dislodge a thrombus and cause embolism, and if the thrombus thus disturbed be infected, we may transform by our manipulations a local into a general infection.

The danger of opening new avenues of infection, without removing all infectious material, is perhaps greater in the puerperal than in the non-puerperal woman. In some of the above mentioned conditions—progressive septicemia for instance, all operations on the genitalia are (with rare exceptions, such as are noted below) worse than useless, they are harmful. Those cases only are operable in which the source of the infection can be removed before a lethal dose has been absorbed. The thorough cleansing and drainage of a womb in which is retained putrefying material, will certainly stop the absorption of this material, and will result in a cure, provided, however, that the cleansing is done before a fatal dose of toxins has been absorbed.

Perhaps in rare instances, early cleansing or removal of infection atriia may, by stopping the further ingress of germs, prevent a fatal issue from progressive septicemia. Such a result can be explained on the ground, only, that the reinforcement of the bacteria in the blood stream is stopped by the operation before a sufficient number of bacteria have gained entrance to overcome the resisting power of the tissues.

I am, however, constrained to believe that this favorable result is obtained less often than is generally supposed, and that many of the cases of septicemia, so-called, that are cured by operation, are really cases of septic intoxication (sapremia).

No surgeon would expect to cure a metritis in which the uterine walls were honeycombed with abscesses, in any way save by hysterectomy; on the other hand a hysterectomy done for an endometritis, or for a sapremia due to absorption from the cavity of the womb, would be as bad surgery as would amputation at the shoulder for an abscess of the biceps, or a localized osteitis of the humerus.

I have no doubt but that every member of this association can call to mind an article recommending curettage, coupled with opening of the cul-de-sac and drainage, in cases of "puerperal infection;" or can recall published reports of cases in which brilliant results were achieved by this method in cases of "puerperal sepsis." I have read a number of such articles and reports from the pens of men of authority, and there can be no doubt but that the treatment instituted was correct, and that the results were highly satisfactory. I would not presume for a moment that these men did not fully understand the pathologic conditions which they sought to remedy by these measures, but I do deny their right to take it for granted that every one who reads their articles will know that by "puerperal sepsis" and "puerperal infection" as applied to these particular cases, is meant infection of the endometrium and pelvic peritoneum. It is the inadequacy of the terms they use to convey a correct idea of the pathologic conditions for which they recommend these measures that is complained of.

The points I wish to make in this paper are:

1. That a diagnosis of "puerperal infection" or "puerperal sepsis" is inadequate.
2. That these terms are continually being applied to cases differing widely in pathology, and requiring radically different methods of treatment.
3. That this looseness and lack of accuracy in the use of terms has led, and will lead to improper and harmful methods of treatment.
4. That practical accuracy in diagnosis is usually possible in the various forms of puerperal infection, and is essential to correct treatment.

THE RATIONALE OF SUBJECTIVE HEALING.

By Smith Baker, M. D.

Utica, N. Y.

It is the claim of subjective healing always and everywhere, that owing to its acceptance and practice, there results a most radical and permanent improvement, or "healing," or cure of every sort of disease, both acute and chronic, and numerous are the instances that are quoted in substantiation of the claim. Careful critical observation leads rapidly to the conclusion however, that if in a given instance the disease happens to be an acute one, it easily falls within one of two classes: either it is naturally self-limiting, or, of ready cure by any means; or else, it has been wrongly diagnosticated. No intelligent person can suppose that a real fracture or dislocation can be healed by mental effort alone. Nevertheless, that many instances which have been diagnosticated as such, and so announced to the sufferer, have been thus "healed," is beyond question. Nor can one suppose that a real case of typhoid fever or of small pox or of pneumonia can be cured in a like manner. Yet again, that many cases of these, as well as of almost every other acute ailment, or at any rate, of such as have been given some sort of technical name, are thus healed, there seems to be no task of indubitable evidence.

Likewise, it does seem to be a fact that many so-called chronic diseases are to be rightly included in the list of these "cures," temporarily, at least. Although, when Dr. John Huber tried to prove that such diseases as locomotor ataxia, softening of the brain, paresis, tumors, Bright's disease, cancer, etc., had been healed by "Christian Science," he succeeded in unearthing no case whatever that would have occasioned the medical man the slightest surprise. Yet, inasmuch as a careful study of these lists of cases reveals that they contain a very large proportion of long-standing functional troubles, such as neurasthenia, hysteria, asthenopia, diffused and shifting pains, joint aches and limitations, vicious digestion, faulty excretion, etc., it does not surprise one to learn that often temporary, and sometimes even permanent relief, is effected. Beginning as these so frequently do in some obvious accident, growth or disease, itself perhaps fully recovered from, there has remained a sequela of distress, that has never been permanently removed. As a consequence, numerous vague or often poignant fears of becoming worse, or entirely incapacitated,

or even of death itself, have grown rapidly with every twinge, and habits of both mind and body have developed conformable to this condition, which in turn serve but to perpetuate and intensify what may be called the secondary trouble. Added duly, also, have been certain unrecognized effects of the vicious maelstrom of circumstances which such people seem always bound to find, then to develop automatically, and finally to suffer from. Hence the purely physical disease that was in the beginning natural enough, has become, in time, transformed into other disease of a more or less truly physical nature, but frequently not recognized as such. Moreover, the very best directed effort to get well has in time, given way to simply an everlasting puttering with a succession of futile remedies and practices, and the last end of it all has finally become worse than the first, even though practitioner after practitioner has been evoked to cure the rapidly deepening and multiplying diagnosis, either professional or lay, and, consequently, of unreliable prognosis and remedy.

People themselves cannot differentiate very well between, for instance, intercostal neuralgia and pleurisy, between the heart commotion and neurasthenia and that of valvular disease, between the headache of brain tumor and that of constipation or eye-strain. And so on. For this they must at first look to medical practitioners, and, as a rule, feel themselves bound to believe implicitly what is told them. Later on, they may come, and sometimes to distrust or but half accept what is told them, by no matter whom, and this whether the diagnosis be correct or not. Again, even when the diagnosis is correct, and thoroughly believed, the prognosis may be altogether more comprehensive and encouraging than possibility of relief of the obvious condition may justify. An instance of a woman with an uterine fibroid comes to mind. She was told very positively and clearly by her surgeon that removal of the fibroid would relieve her of her morbid apprehensions, her temporary exhaustions, aphasias, and paraphasias, and all her sense of fag and incompetency as well. The operation was a complete success. Nevertheless she was not cured, and within a few weeks afterward, she said, "It makes one feel like taking the Christian Scientists at their word and trying them."

Finally, when it comes to the treatment itself, there is a disparity between promise and accomplishment often simply irreconcilable. Physicians all know how persistent certain people are in their endeavors to get positive statements, especially when such

are as absolutely impossible as unnecessary. But they do not always remember the certainty with which sick people are apt to read into their most carefully uttered words their own conceits, hopes and misgivings, and so get unto themselves a summary of fact and fiction, which may be as mischievous as misleading. These people think, for the time being, but one thing, namely, that their own concerns are paramount to all else. With this, they give tone to all that is told them and likewise to all that is not said. As a result they either expect miracles on the one hand, or else a long delight in whatever succession of new sensations the practitioner may be able to afford them on the other. Moreover, they do not forget that they are sick, that a cure has been promised, or that it seems long delayed. Quite a number of illustrative cases of asthenopia with accompanying ocular defect, who had been assured that refractive and muscular correction would bring permanent relief, and yet to whom relief did not come, even after repeated changes of lenses, and various operations and treatments, is in evidence. Here the ocular defect, the muscular unbalance, the adjustment of special treatment and lenses had all been skillful enough. But the one thing—a comprehensive diagnosis of the whole person as well as the eyes, had been neglected. Numbers of other cases of what had been accurately enough diagnosed, say as astigmatism or hypermetropia, and have found no relief from refractive correction, have found it, at least to their own satisfaction at the hands of some sort of subjective “healer.” And so with cases of dyspepsia, kidney disease, uterine troubles, etc., almost innumerable. And why? Simply because the real nature of the difficulty as affecting the whole patient, had been lost sight of in the intensity of the special interest, given quite exclusively to some particular part. The following conclusions may be entertained.

First. The final unsatisfaction of diagnosing, if never so accurately, the special affection alone, and not at the same time giving heed to the entire individual in whom it is found. The time has really seemed to come when we should go to the modern psychological and pathological laboratories and there learn that the human being is neither mind nor matter alone, but that in every feeling, thought and act there is a unified energizing, of which mind and body alike are necessary concomitants.

Second. The utter uselessness of wearing out people with multitudinous remedies, of no matter what order, that are aimed

only at symptoms, and, likewise, the harm which may be done in thus cultivating uncalled for dependence upon just such supports. One need not be an extremist, or a skeptic, to see the absolutely scientific injustice of this.

Third. The danger of extreme concentration of a purely subjective order, and of the psychical elation which has not been given a corresponding solid basis to sustain it. It cannot be said that any such exclusive devotion to one aspect of life, is very generally developmental or safe, in the long run. What most of these people need is a clean, new set of mental images to be derived objectively rather than concreted from, no matter how intense, subjective application.

Fourth, the inadequacy of even a good initiation, when subsequent developments are defective or counteracting. The "healer" often seems to make a good start and in the right direction, so far as the particular individual is concerned. But his lack of physiological and pathological culture, to say nothing of the theological and psychological atavism which possesses him, robs the patient of that further restoration and development of mind and body alike, which he so universally needs.

Fifth. Unless the body has been remedied, the mind furnished and stayed, and the conduct ordered in accordance with actual needs comprehensively estimated, no cure worthy the name can be expected from either materialist or idealist.

Sixth. That neurologists and psychiatrists should proceed at once to determine how far results, which are now secured haphazard and irresponsibly, can be gained by truly scientific inquiry and practice. This is needed, if for nothing more, than that medical education and practice may receive a proper impetus and backing in this much-needed direction.

Seventh. That people, especially when young, should be encouraged to most sedulously cultivate bodily endurance, mental growth and freedom, moral heroism and spiritual self-reliance, faith in inductive science, rather than trust in dogmatic deduction; all in the hope, that where now there is such a readiness to develop morbid introspection and fears, imperative conceptions, and mental shiftlessness, there shall be achieved a commendable flexibility and direction of mind, and the possibility of a joyous overcoming of ordinary obstacles.—*Abs. Jour. Ner. and Ment. Dis.*, June 1901.

SOCIETY PROCEEDINGS.

ALLEN COUNTY MEDICAL SOCIETY.

The mid-summer meeting of the Allen County Medical Society was held at Robinson Park on Tuesday, June 18th. Unfortunately Dr. J. H. Musser, who was to have delivered the principal address, failed to put in an appearance. The balance of the program however, was carefully followed. Dr. W. H. Myers presented a paper upon "Heredity of Disease," and Dr. G. W. McCaskey a paper upon "Some of the Problems of Preventative Medicine." Owing to the fact that these two papers were of a character to demand the interest and attention of the general public, they were ordered published in the daily press of the city. Dr. K. K. Wheelock presented a paper on "Morphinism." All three papers were well received and elicited extended discussion.

Following the scientific program a banquet was served in the main pavilion to about 100 physicians and their wives. The evening was spent at the park theatre where a vaudeville performance was enjoyed.

This meeting was the last prior to the summer vacation of July and August, regularly taken by the society. The usual bi-weekly meetings will be resumed the first Tuesday evening in September.

AMERICAN MEDICAL ASSOCIATION.

The fifty-second annual meeting of the American Medical Association was held at St. Paul, Minn., June 4, 5, 6 and 7, 1901. Owing to the fact that the place of meeting was a little out of the way for the larger part of the members of the society who reside in eastern states, it was thought that the attendance would not be very large, but contrary to expectations the St. Paul meeting was one of the largest in the history of the association. Long before the time for the meeting all available hotel accommodations had been engaged, and members who had not previously engaged ac-

commodations were compelled to seek quarters in private residences and boarding houses. The local committee on arrangements at St. Paul had made all necessary preparations, and the quarters for the various sections, general sessions, committees and exhibitors were conveniently located. The general headquarters of the association were at the Hotel Ryan, and within 200 feet were also located the bureau of registration and exhibits, and the Metropolitan Opera House where the general sessions of the society were held. The various sections were located at the prominent hotels and club houses within easy reach, due care being observed to locate allied sections close to each other.

The usual order of business was followed at the general sessions. The president's address, by Dr. C. A. L. Reed, of Cincinnati; the Oration on Surgery, by Dr. John A. Wyeth, of New York City; the Oration on Medicine, by Dr. N. S. Davis, Jr., of Chicago, and the Oration on State Medicine, by Dr. George M. Koeber, of Washington, were of a high scientific order and well received.

One of the most important pieces of business transacted at the general session was the adoption of the reorganization scheme, as proposed by the committee appointed last year to look into the matter. The main feature of the scheme of reorganization is the creation of a "House of Delegates," which is to be the legislative and fiscal body of the Association. This House of Delegates consists of one delegate for every 500 of the resident regular members of each state and territorial society entitled to representation in the Association, but each affiliated state society shall be entitled to at least one delegate, even though such society shall not have 500 resident regular members. In addition to this two delegates are elected from each of the competent sections of the Association, one delegate each from the medical department of the United States Army and United States Navy, and one from the United States Marine Hospital service. The total membership of the House of Delegates is not to exceed 150, and the delegates representing the state societies shall be apportioned among the several affiliated state and territorial medical associations in direct ratio to their true membership. The reorganization scheme carries with it the adoption of a new constitution, which in intent and purpose is very similar to the old constitution with amendments and by-laws.

At the meeting of the nominating committee on the afternoon of the second day the following report was adopted and later

passed at the general session: For president for the ensuing year Dr. John A. Wyeth, New York; first vice-president, Alonzo Garcelon, Maine; second vice-president, A. J. Stone, Minnesota; third vice-president, A. F. Jones, Nebraska; fourth vice-president, John R. Dibrell, Arkansas; treasurer, Henry P. Newman, Illinois; secretary, Geo. H. Simmons, Illinois. On motion the ballot of the committee was cast for Geo. N. Webster, Illinois, for librarian. Board of trustees, term expiring 1904, W. W. Grant, Colorado; John F. Fulton, Minnesota; T. J. Happel, Tennessee. Judicial council, Geo. Cook, New Hampshire; H. H. Grant, Kentucky; John B. Murphy, Illinois; Philip Marvel, New Jersey; Louis H. Taylor, Pennsylvania; John L. Dawson, South Carolina; N. Fred Essig, Washington. Oration on surgery, Harry Sherman, California. Oration on Medicine, Frank Billings, Illinois. Oration on State Medicine, J. M. Emmert, Iowa. Place of meeting, 1902, Saratoga Springs, N. Y. Chairman of Committee on Arrangements, G. F. Comstock.

NOTES OF THE MEETING.

It is reported that between seven and eight hundred physicians attended the meetings of the sections on surgery, practice of medicine, and obstetrics and diseases of women.

The president announced that he had just appointed Dr. Judson Daland as a delegate to represent the American Medical Association at the World's Tuberculosis Congress to be held in London on July 22nd of this year.

The pathological exhibit was as usual an exceedingly interesting feature of the meeting, and Indiana had the honor of being in the front rank as one of the best contributors to the exhibit. The Association continued the annual appropriation of \$500 for the expense of the exhibit.

The Association adopted resolutions expressing appreciation of the generous gift of \$200,000 donated by Mr. John D. Rockefeller, of New York, for the promotion of original investigation. The

money has been placed in the hands of a committee composed of medical scientists, under the able chairmanship of Prof. William H. Welch, of Baltimore. A copy of the resolutions passed by the Association were ordered forwarded to Mr. Rockefeller.

The members of the Association are indebted to the physicians of Minneapolis for souvenirs containing views of the buildings of the University of Minnesota. The members are also indebted to the Minneapolis physicians for a reception and ball at the Armory building of the University of Minnesota on Thursday evening, and a smoker at the Laboratory of Medical Sciences on the same evening.

The general executive committee advised that a committee of three be appointed to revise the Code of Ethics, with instructions to report at the next annual meeting of the Association, and that a printed report of their revision be published in the Journal of the American Medical Association not later than April 1, 1901. This recommendation, however, failed to receive the endorsement of the Association, and for the present at least, the old Code of Ethics will remain as standard of the Association.

President Reed, in his presidential address, recommended that the Association appoint a committee to draft appropriate resolutions commemorative of the lives and distinguished services of deceased presidents of the Association. The general executive committee endorsed the recommendation and recommended that the resolutions apply to the lives of Alfred Stille, Lewis A. Sayre, R. Beverly Cole and Hunter McGuire, all recently deceased. The report of the committee on motion was unanimously adopted.

Miss Susan B. Anthony and Rev. Anna Shaw, representatives of the National American Woman's Suffrage Association, were given ten minutes each at the third general session of the Association for the presentation of a memorial relative to regulation of vice in the United States Army. The Association gave respectful attention, but took no action whatsoever upon the questions at issue until the following day, when the memorial was to all intents and purposes rejected through the adoption of a resolution asking congress to repeal the "anti-canteen law."

The secretary's report showed that the Association is in a very prosperous condition, the membership at the present time being over 10,600, an increase over last year of nearly 1,600, the largest increase of any year in the history of the society.

The adoption of the reorganization scheme means the elimination of the general meetings of each forenoon, which have always been the means of cutting short the section meetings. The general meetings for the orations will be held in the evening, and the sections will therefore be allowed to continue undisturbed until the usual noon adjournment. It is thought that the general sessions in the evening will invariably adjourn about nine o'clock, thus giving ample time for social functions between that hour and twelve (or much later as is usually the case).

The address of welcome by Hon. R. A. Smith, Mayor of St. Paul, was a particularly pleasing one to the members of the Association, who were complimented for their enterprise, learning and humanity. Among other interesting things he said that St. Paul, as the statistical records of mortality show, is the healthiest city in the world. He also said that where now stand in the city of St. Paul numerous modern equipped hospitals, only fifty years ago there stood the Indian tepee, inhabited by the Indian medicine man, who sought to drive away disease through the spell of his numerous Indian charms and incantations.

President C. A. L. Reed, as might be expected, delivered a forceful, scholarly and altogether exceedingly interesting address. He considered the affairs of the Association in the light of previous advancement and future prosperity. Not a small part of the address was devoted to a consideration of the ways and means of effectively controlling medical practice and in raising the standard of medical education. The address closed with an appeal for the adoption of the re-organization scheme of the Association, which it was thought absolutely necessary in order to secure unification of our national profession. The address, while much longer than it should have been, seemed longer than it was because of the slow, but distinct and forceful delivery.

The committee on national legislation reported that as a result of the combined efforts of the committee and the delegates to the annual conference, the obnoxious senate bill number 34, entitled "For the Further Prevention of Cruelty to Animals in the District of Columbia," known as the "Antivivisection Bill," had been defeated and rendered practically impossible of passage in the future. The committee also reported that largely as a result of these efforts the passage of senate bill number 4771, entitled "An Act Granting Additional Quarantine Powers and Imposing Additional Duty upon the Marine Hospital Service," and the defeat of section 150 H. R. bill number 13,423, "The Codification of Postal Laws." This section, if it had become a law, would have cost the American Medical Association about \$35,000 extra in postage in connection with the distribution of the Journal to members and subscribers.

The address of welcome on behalf of the state of Minnesota was delivered by Governor Van Sant. The address was humorous and well received by the members of the Association. Among other things the governor said that he was in sympathy with the movement to have the Association hold its next annual meeting in the South, for the reason that he believed that the North and South should keep in close touch with each other. He recalled his own opposition to the meeting of the Grand Army of the Republic south of Mason's and Dixon's line, and looked back with much pleasure to the extremely cordial and patriotic welcome which the city of Louisville gave them in 1895. Their patriotism and their hospitality was so universal throughout the city that even the word "welcome" in large letters was placed over the door of the city jail. The governor said that when it was decided that the American Medical Association should hold its next meeting at St. Paul the citizens of St. Paul had torn down their jail, as it was not a place where the St. Paul people desired to extend their welcome.

The entertainments to the members of the American Medical Association consisted in the following: Tuesday evening, the section banquets; Wednesday evening, reception at the residences of Dr. and Mrs. Baldor Sneve, Dr. and Mrs. Charles A. Wheaton, Mr. and Mrs. Geo. Thompson, Mr. and Mrs. Gustave Scholle and

Mr. and Mrs. Dorand. The Minnesota State Medical Society and the Ramsey County Medical Society tendered a smoker at the Ryan Hotel after 10 p. m. on the same evening. Thursday evening there was a reception and ball at the Armory on the Campus of the University of Minnesota in Minneapolis, tendered by the physicians of Minneapolis. There was also a smoker in the laboratory of the University of Minnesota on the same evening. On Friday evening the American Medical Association's special train left over the Northern Pacific road for a tour of the Yellowstone Park.

The entertainment for the visiting ladies included a reception at the residence of Mrs. E. Villiers Appleby on Tuesday, an excursion by electric cars to Minnehaha Falls on Wednesday, a drive to Lake Como and the Town and Country Club on Thursday, and a steamer excursion to Fort Snelling on Friday.

One of the most important actions of the Association and one that will undoubtedly bring the Association into disrepute with the various temperance organizations of the country is the adoption of the following resolution regarding the army canteen:

"RESOLVED, That this body deplores the action of Congress in abolishing the Army Post Exchange or Canteen, and, in the interests of discipline, morality and sanitation, recommends its re-establishment at the earliest possible date."

This resolution was presented by the Committee on National Legislation, and is the outgrowth of careful study and observation by the medical department of the United States Army, is concurred in by the commanding officers at the several posts, and is intended to correct abuses under the present law which result in drunkenness, desertion, insubordination, dishonorable discharge, crime, poverty, appalling increase in venereal disease and invalidism among the soldiers of the United States Army.

The Committee further reported that the experience of foreign governments coincides with that of the National Association of Military Surgeons in the necessity for the Army Post Exchange or Canteen.

The committee recommended that the American Medical Association petition the Congress of the United States to repeal, at the earliest moment, the objectionable law which prohibits the Army Post Exchange or Canteen.

The report of the Committee, with all recommendations, was adopted unanimously, there being not a dissenting voice raised.

One of the pleasing features of the first session was the presentation of a portrait of Dr. N. S. Davis to the American Medical Association by the medical profession of Chicago. In the presentation address Dr. J. R. Pennington among other things said: "In the hope of initiating work in this part of the archives of the American Medical Association, I come prepared to present for your acceptance the portrait of one whom you will all recognize as pre-eminently the founder of this Association, and for more than fifty years its most constant attendant and faithful guide in every department of its work. One who has perhaps done more than any other individual in promoting the efficient social organization of the medical profession throughout the United States, and in elevating the standard of medical education. One who has been a pioneer investigator in the departments of physiology, hygiene, preventive medicine and medical journalism. One who has been an untiring and valuable contributor to medical science and literature, and who has enjoyed the highest official honors that his profession could bestow—president of this Association and of the Ninth International Medical Congress. One who in his own city organized the first permanent general hospital and established clinical instruction therein and who was one of the founders and active supporters of the Chicago Relief and Aid Society for aid to the poor, of the Chicago Academy of Sciences, the Chicago Historical Society and the Chicago Medical Society. One who has been a life-long advocate and exemplar of temperance, morality and religion, and who still, in his 85th year of life and 65th year of medical practice, devotes five or six hours daily to his patients and attends promptly to all the duties of good citizenship in strict obedience to his favorite maxim, 'He is most happy who is contributing most to the happiness of others.'"

On motion the portrait of Dr. Davis was accepted by the Association, and a committee of three was appointed for the purpose of securing portraits of all living presidents and ex-presidents of the association as far as possible.

The general executive committee introduced resolutions which were passed, directing the sections to reduce the number of papers to at least 35 for each annual meeting. It was also decided that no titles of papers will be printed in the program unless the required abstract is furnished and printed in connection with the

same. These rules were found necessary because of the large number of papers offered for presentation at the annual meeting, and the general negligence on the part of essayists in preparing abstracts of papers for the program, as required by the regulation adopted some years ago. The total number of papers for the St. Paul meeting was 391 as against 491 at Atlantic City, and 615 at Columbus. It is thought that from 250 to 300 papers are all that can be satisfactorily read and discussed each year, and that by limiting the number of papers it will be possible to secure productions of much higher scientific value.

The report of the board of trustees showed that the Association has prospered **financially**, the revenues from all sources having greatly increased. The aggregate cash on hand by the treasurer on January 1, 1901, was approximately \$21,000, which, as compared with January 1, 1900, is an increase of about \$6,500. Deducting \$3,000 which was paid in as a realization from an investment, the gain is approximately \$4,000. Aside from this, however, the Association has expended nearly \$10,000 for machinery in connection with the Journal plant at Chicago, and the usual Association expenses, including the cost of publishing the Journal, have all been paid from the receipts. There has therefore been a clean profit for the year 1900 of nearly \$14,000, which the trustees have seen fit to add to the \$10,000 already invested in United States bonds, making a total of \$25,000 as a reserve fund to be eventually used in the purchase of a home for the Journal. The Journal plant, which has been fully paid for, is worth, with all deductions for depreciation and wear and tear, \$21,000.

The gain in the collections from advertisers in the Journal was \$10,300 for the year 1900, which is a slightly larger increase over the year previous and makes a doubling of the revenue from advertising within a space of two years. For the four weeks of January, 1901, the **Journal carried over \$1,000** worth of advertising in each issue, and it is thought that this amount will be continued throughout the year, making a very substantial increase in the revenue of 1901 as compared with that of 1900.

On January 1, 1900, but 13,635 copies of the Journal were mailed, whereas on January 1, 1901, 18,842 copies were mailed. Of this latter number 9,841 copies are sent to the members of the American Medical Association entitled to the same, and 8,339

copies go to regular subscribers. The increase for the year 1900 was double that of either 1898 or 1899.

The trustees recommended that in the effort to make the Journal the best medical periodical in the world, that the number of papers read in each section at the annual meeting be limited to 35, and that in order to still further improve the quality of the material, to eliminate as far as possible all that would be of little value to journal readers, and, to fix the responsibility for all that is admitted to the pages of the Journal, no paper presented to any section should be printed in the Journal until it has received the approval of the three members of the committee from that section, evidenced by their signatures to said paper.

The report of the board of trustees, with recommendations contained therein, was unanimously adopted.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

RESPECT FOR PROFESSIONAL OPINIONS.

It has been repeatedly charged that doctors never agree and are constantly seeking opportunity to contradict each other. That this opinion is not without some foundation of truth is evidenced by an occurrence of recent date in the city of Fort Wayne. A young child, supposed to have been exposed to small pox, was found convalescing from a disease diagnosed by the county and city health officers as small pox and a quarantine was established. The attending physician who made a diagnosis of chicken-pox represented interference and upheld the patient's father in disobeying the quarantine rules. As a result of the breaking of quarantine regulations the patient's father was arrested and stood trial in police court. At this trial the attending physician and one or two others testified to the effect that they had seen but one or two cases of small pox, and one or two other physicians testified to the effect that they had never seen even one case of small pox; yet each

and every one of these medical witnesses asserted that the disease in question was nothing more than chicken-pox. On the other hand the county health officer testified that he had seen several thousand cases of smallpox of various types, and had during the past year seen several hundred cases. The "small pox physician" for the county testified to having seen and personally treated several hundred cases of small pox within the past year. The city physician testified that he had seen many cases of small pox in this country and Europe. These three physicians of experience testified that the case in question was small pox, and was therefore very properly quarantined as such. The Christian Science judge, after alluding to skeptical personal opinion, but recognizing the requirements of his official position, very properly fined the defendant. Owing to the conflict of testimony the case has been appealed and it remains to be seen whether the recognized health laws are to be enforced or are to be totally ignored through the opposition of physicians who ought to be the most active in efforts to maintain quarantine regulations in all suspicious cases.

Whether the case was small pox or chicken pox is of but little moment in a consideration of the attitude taken by the attending physician and his friends. We have a right to assume that the city and county health officers were honest in their convictions that the case was small pox, and their convictions were presumably based upon the appearance of the case as compared with many cases seen in their extended experience with the disease. They therefore were acting in their capacity as efficient officers in ordering quarantine, and any other treatment of the matter by them would rightfully be considered a menace to public health. Even granted that they were wrong and the case was nothing but chicken-pox, no harm was done and the effort to protect the people by quarantining doubtful cases is worthy of commendation. Better that a dozen cases of chicken pox be diagnosed and handled as small pox than that one case of small pox escape as chicken-pox.

Nearly all of the serious outbreaks of small pox have occurred through a mistaken diagnosis of chicken-pox, and fully a dozen Indiana counties that have suffered from the ravages of small pox, have learned through expensive experience that a diagnosis of chicken pox by the "leading physicians," in disagreement with the county and state health officers of extended experience, is not always to be trusted.

On the other hand what is to be gained by opposition to recog-

nized health authorities, even admitting the correctness of diagnosis? As in the present instance the people learn to distrust physicians in general and to lose respect for the opinions of physicians. There is no better way to encourage the popular belief that "physicians never agree" than to create such episodes as that herewith mentioned.

It is not our desire to uphold either side of the controversy mentioned, for we recognize the possibility on both sides to err, but we do wish to defend the principle involved which it is absolutely necessary to maintain in order that our profession, of which we are so justly proud, may continue to hold a respected position in the eyes of the people whose health guardians we are rightfully presumed to be.

Our health officers may make mistakes, but their mistakes are usually on the side of safety, so far as it pertains to the restriction of contagious and communicable diseases. If any criticism of our health officers is warranted it is for laxity in laying down and enforcing rules for the preservation of health and restriction of disease. Seldom if ever are we warranted in criticising for undue enforcement of quarantine and other regulations.

Leaving out the question of diagnosis and all personal antagonisms, we submit that opposition to the rules, regulations and conduct of our duly authorized health officers by medical men, as in the instance cited, is a fruitful source of popular distrust and disrespect for medical opinion of any kind or form, and is unbecoming progressive and ethical gentlemen of the medical profession. We therefore hope that in the interests of public respect for the opinions of medical men that there will be no further opposition to well meaning action on the part of our authorized health officers in their actions to restrict and suppress contagious and communicable diseases.

A. E. B.

POLITICS VS. PUBLIC HEALTH.

The rights and interests of the American people have so frequently been subjected to the vicious influences of politics that it now seems quite natural to expect anything but the best, in the sense of the greatest good to the largest number of people, from those who hold legislative and executive power. While it is undoubtedly a fact that many legislative and executive acts are brought about through a liberal use of money or its equivalent, yet

the larger number of laws and executive requirements are the product of politics, and brought about purely for the purpose of personal or party advantage. While many of the vicious laws and regulations are tolerated by the people because their enforcement means pecuniary loss only, yet there are some legislative and executive acts and regulations which should never be tolerated by a free and independent people. We refer to those laws and regulations which have to do with the public health.

If there is any one thing more than another which should have the fostering and protecting care of our legislative and executive powers it is our public health, and that man, no matter what official position of trust and honor he may occupy, who sacrifices public health interests to personal or party advantage, is not only undeserving the confidence and respect of the people, but should be forever debarred from political or social preferment.

Questions pertaining to public health like questions pertaining to our public schools should be divorced from politics and from all the vicious and degrading influences surrounding political actions. There is nothing which tends more to make loyal and intelligent citizens and promote the material welfare of the nation than good health and good education, and when either are subjected to the influences of party politics the vital interests of the nation are jeopardized to an extent unwarranted in any progressive country.

We have had occasion to bitterly condemn the incompetent "board of water works trustees" of the city of Fort Wayne, for their unwarranted and unjustifiable action last year in turning the foul and disease breeding water from the old canal into the city water mains on the plea that the shortage in supply necessitated such action. That action, undoubtedly taken with a view to making it the initial step in a long contemplated plan to purchase the canal, and quite likely reap pecuniary profit through the transaction, was the direct cause of more typhoid fever within the corporate limits than the city of Fort Wayne has previously known since the water works system was established, and the headstones over several graves of typhoid victims are monuments to the incompetency, if not the dishonesty, of the board of water works trustees for the year 1900. Fortunately the city bacteriologist, with the courage of his convictions, warned the people that the filthy water of the city mains would bring disease and death, or otherwise the mortality would have been appalling. He also informed the public

that the water from the gravel wells, from which the city was getting a part of its supply, was not up to standard, but that the water from the rock wells, the original source of supply, was as pure as the drinking water of any city in the world.

We have already been informed by experts that it is possible to obtain a supply of rock well water sufficient for the needs of the city of Fort Wayne for the next hundred years, and it would seem that after the public disapproval of the present system of obtaining water supply the board would make an effort to obtain more rock well water, if for no better purpose than to appease the wrath of an outraged public. But anything to improve conditions tending to the betterment of public health is too much to be expected from a board which seemingly has no higher ambition than to conduct the affairs of office in an arbitrary, selfish and wholly incompetent manner.

The water supply of the city of Fort Wayne is still polluted, as evidenced by the report of the retiring city bacteriologist made not two months ago, when he said that the water of the city mains was not fit for human consumption. This verdict from a very competent and efficient bacteriologist is as true to-day as it was the day it was made, and the residents of the city of Fort Wayne are as much confronted to-day with the necessity of boiling or otherwise making the water supply germ free before consumption as they were last year. We will admit not only the possibility, but probability that the water in the city mains contains fewer harmful micro-organisms than it did last year when the filthy canal water was furnished the people as a beverage, but that does not alter the fact that there are still enough disease producing germs in the city water to kill a whole regiment.

All of which leads us to say that the public health interests of the city of Fort Wayne receive too much political attention and not enough of that attention which means subservience to the public interest and the public good. We have no personal grievances to offer, but are prompted in our criticism by a desire to have justice meted to the people whose servants the politicians should be, but seldom are. The "public office is a private snap" rule has too long been in force in dealing with all questions of vital interest to the people, and it is time that radical reforms be adopted, to the end that the life, health and happiness of the people be not in constant danger from the viciousness of erratic, and not infrequently unscrupulous politicians.

A. E. B.

NEWS NOTES AND COMMENTS

FRACTURES ILLUSTRATED.—Some months ago Messrs. Battle & Co. began the publication of colored lithographs illustrating the more important bone fractures, and we have before us the fourth of the series, showing the fracture of the neck of the femur. The bones and muscles in their relation to each other are accurately illustrated, various colors being used to bring out the more important details.

DR. BOND IN EUROPE.—Dr. Charles S. Bond, of Richmond, ex-president of the Indiana State Medical Society, left on the 14th inst. for London, where he will attend the Congress of Tuberculosis to be held July 22 to 26. His trip will be extended to the continent, and while away he will collect material for further work in biological investigation, in which he is especially interested. Dr. Bond expects to be in Europe the greater part of the summer.

INSURANCE AND CHRISTIAN SCIENCE.—At a late session of the New Jersey Grand Council of the Royal Arcanum the 200 representatives of the 117 councils in the state were opposed to the payment of the benefits due members if they refused or neglected to procure medical aid when ill. Future candidates for membership in the order in New Jersey are not eligible unless they agree to obtain medical aid when ill, under penalty of forfeiture of insurance.—*Amer. Medicine*, May 18, 1901.

BOOKS FOR SALE.—The editor of the *Journal-Magazine* has a set of the latest revised edition of the Encyclopedia Britannica, American edition, 25 volumes, bound in half moroco, but little used and in excellent condition, for sale at a remarkably low figure.

He also has a new and unused set of the Comprehensive Encyclopedia, latest edition, 8 volumes, bound in half moroco, which is for sale at a greatly reduced price. These books are a great bargain for any one who has not a set of Encyclopedias. Full information will be given upon application to the editor.

NOVEL WILL TENDING TO IMPROVE RACE.—The recent laws

concerning marriages which have been proposed in Indiana and Minnesota have been outdone by the terms of a will made a few months ago by Count Saint Quen de Pierrecourt, an inhabitant of Rouen, who has left his estate to the town under the following conditions: Every year \$20,000 will be given to a married couple who will be chosen for their size and strength. The man and his wife will have to be examined by the physicians of the town, and the latter will report as to their condition.—*Jour. Amer. Med. Assoc.*

MEDICAL COLLEGE DESTROYED.—During a heavy thunder storm on the night of June 25, lightning struck the College of Physicians and Surgeons in Chicago. The fire which followed the lightning in a short time destroyed the building, which was one of the finest of its kind in the west. The West Side Hospital adjoining the college, which contained about 100 patients, was also partially destroyed, but all of the inmates were safely transferred to near by hospitals where they were properly cared for. The College authorities announce that the College building will be rebuilt, and it is hoped that the repairs may be completed in time for the opening of the College year in the fall.

REMARKABLE CASE OF DECEPTION.—There has been a good deal written recently in the French newspapers about a young woman at St. Germain who had needles coming out from different parts of her body. She said that she had swallowed a package of needles some five years ago, and they were only just beginning to come out. The physician and the druggist had already removed 50 needles, when some one told her that the pricking of the skin would be the cause of serious inflammation. The phenomenon stopped very soon after, and as the needles were always found on the left side and always came out by the blunt end, it was shown that she had been practicing deception.—*Jour. Amer. Med. Assoc.*

FRENCH CATALEPTIC NOW SHOWING SIGNS OF APPROACHING DEATH.—A girl named Marguerite Bougenval, living in the village of Thenelles, department of the Aione, who has been in cataleptic sleep for eighteen years, shows signs of approaching death. During her long sleep Marguerite has been visited by most of the leading medical men of France, including

Dr. Charcot. She is kept alive by alimentary injections of peptone four times a day, but is now slowly assuming a cadaverous appearance. Her flesh is subsiding, leaving the bones protruding to a remarkable extent. Her local doctor thinks that Marguerite's eighteen years of sleep will soon assume the character of eternal sleep.—*Chicago Record-Herald*, Sunday, June 23, 1901.

VACATIONS OF FORT WAYNE MEDICAL MEN.—Dr. C. B. Stemen will spend the month of July in Colorado visiting his son, Dr. George C. Stemen, and otherwise employing his time in rest and recreation. Dr. Miles F. Porter will spend a week at the Pan-American Exposition at Buffalo. He will also spend a week fishing in some of the Indiana lakes. Dr. George L. Greenawalt, after attending the American Medical Association at St. Paul, started on a six weeks' western tour, the trip being his usual annual vacation. Dr. E. J. McOscar will visit the Pan-American exposition at Buffalo, and following that take an extended tour through Canada. Dr. B. Van Sweringen will visit the Pan American Exposition and continue his trip to New York and other eastern cities. Dr. Maurice Rosenthal spent the month of June in the west following attendance at the St. Paul meeting of the American Medical Association. Dr. Wheelock will spend the month of July in a trip down the St. Lawrence and visits to many Canadian cities.

TRAINING OF PHYSICIANS.—An editorial in the *Indiana Medical Journal*, by Dr. A. W. Brayton, upon "The Training of Physicians," is reproduced in a recent number of the *Indianapolis Journal*. Commenting upon the address of Dr. Welch before the Association of American Physicians at Washington, in which the fact was announced that nowhere in the world is it possible to secure better instruction and more opportunities for practical work in scientific medicine than at some of the higher graded institutions of this country, Dr. Brayton says that it must not be forgotten that all medical men cannot be medical scientists or teachers, and that in smaller cities and towns it would be impossible for a medical scientist to put his talents to the highest and best uses. Dr. Brayton contends that the making of practical and useful physicians and surgeons will still be left to medical colleges which are not classed among the ultra-scientific institutions. No plea for a cheap or superficial education is made, but it is recognized that

there is a demand for well educated and practical physicians in localities away from the centers of population where medical scientists, specialists and other highly trained men will not be found, because their services are not in demand. To fill this want the lesser schools of the country will always be found necessary as a type of medical education which is adapted to the requirements of the masses of the people.

CHRISTIAN SCIENCE.—Elbert Hubbard, of the Philistine—a beautiful publication from the nest of Roycrofters, who live just east of the Rising Sun—pays his compliments to a Denver “healer” in the following way: “Thomas J. Shelton, of Denver, Col., edits and publishes a paper called The Christian. Shelton says he does not publish for one week as Jesus would—he does it by the year—one dollar a year, and sends you gratis Health Vibrations every day at 4 p. m. as a premium. In the United States to-day there are thirty-nine publications issued by Divine Healers, who claim to be divinities incog. But Thomas J. Shelton, of Denver, is not satisfied with being a plain J. C.—He claims to be God Almighty. I do not exaggerate in the slightest—this is just what Shelton says twenty times in every issue of his paper. He calls himself the I AM. Shelton gets two hundred letters a day, and his net income is not less than twenty-five thousand dollars a year. His paper is surely amusing, but its great circulation is undoubtedly caused by the premium of Health Vibrations. Shelton will send you vibrations that will bring you success in business, make the lady of your desire love you nearly to death, and cure you of that tired feeling. As a curer of disease, R. S. V. P., of Buffalo, with his Golden Discovery and his yacht Flim-Flam, is not in it with Jupiter Shelton. Personally, I prefer Shelton to Munyon (that beautiful old onion with a Corbett hair-cut)—for Shelton’s remedies never salivated anybody. He sends me No. 6 Vibrations, and if he is short on 6 he always sends No. 4 and No. 2; and with all three I believe he could make whiskers grow on a brass monkey! Anyway”—Hubbard continues—“I haven’t had an ache or a pain since I began to read Shelton’s paper.” By the same token, he hadn’t had one for years before; for if there is anywhere on earth a picture of physical and mental vigor it is Editor Hubbard, sometimes of East Aurora, N. Y.—*Am. Jour. Surgery and Gynecol.*

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

VARIABILITY OF THE TUBERCLE BACILLUS.—Ramus (J. A. M. A. June 15th) writes upon the variability of tubercle bacillus, and concludes that this bacillus is not always easy to demonstrate. The staining reagents cannot be depended upon absolutely. The bacilli from different patients, and occasionally at different times from the same patient, may react to different stains in different ways. Physical and chemical changes in the bacilli probably influence the tinctorial variations. When distinct physical signs of tuberculosis exists, even in the absence of demonstrable tubercle bacilli, the diagnosis should be made so as to give the patient the benefit of the doubt, and treatment instituted promptly.—*Phil. Med. Jour.*

THE BACTERIOLOGY OF SPORADIC CEREBRO-SPINAL MENINGITIS.—Hunter and Nuthall (Lancet, June 1st), discuss the bacteriology of cerebro spinal meningitis. They give a report of ten cases and conclude that a diplococcus was found in the cerebro spinal fluid of all the cases. Morphologically and biologically this diplococcus was identical with Weichselbaum's diplococcus intracellularis meningitidis. In some of the cases bacillus influenzae and the bacillus of tuberculosis were associated, while in others the diplococcus was found in pure culture. The clinical and pathological manifestations, found in the cases they analyzed, were identical with those of the so-called posterior basal meningitis. They suggest that posterior basal meningitis is probably a sporadic form of cerebro spinal meningitis due to the diplococcus intracellularis meningitidis.—*Phil. Med. Jour.*

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

PROFUSE SWEATING.—Aromatic sulphuric acid, in doses of from ten to twenty drops in chamomile tea, taken at bedtime, arrests profuse perspiration.—*Med. Summary.*

TREATMENT OF SEPTIC INFECTION.—Van Telburg-Hoffman (*Charlotte Med. Jour.*, March, 1901) cites a number of cases of septic infection, including sapraemia, septicaemia and pyaemia, treated successfully by the hypodermic injection of oil of turpentine. Fifteen minims are injected. An abscess forms at once and is opened in about a week, drained and dressed aseptically.

PERINEUM; NEW METHOD OF SUPPORTING.—J. Hofbauer (*Cent. f. Gynec.*, Feb., 1901) (*Monthly Cyc.*, June) recommends that the head be rotated 40 degrees so that it shall emerge from the vulva obliquely. It is important however that the head be allowed to engage in the vulva in the antero-posterior and be rotated only after the posterior edge of the fontanelle has appeared.

GALL-STONES TREATMENT.—According to Reidel (*Berliner Klin. Wochen.*) (*Monthly Cyc.*, June) repeated attacks of gall-stone colic with the passage of a stone each time do not call for operation, nor does a single attack accompanied, or followed, by the passing of a stone. A single ineffectual attack without jaundice indicates operation. Operation is also indicated in cases where after repeated ineffectual attacks jaundice occurs indicating that the stone is impacted in the common duct. By waiting two or three weeks one can decide whether or not the common duct is obstructed.

RETROPLACED, PREGNANT, INCARCERATED UTERUS.—Dr. L. Seeligmann says that the first procedure is to elevate the uterus by carrying it through one of the oblique pelvic diameters, preferably

the right oblique, so that the rectum will not interfere with the manœuvre. It is accomplished by pushing the cervix backward and gently raising the fundus. A colpeurynteur filled with fluid is then to be placed behind the uterus in the same diameter as that occupied by the uterus. The colpeurynteur is to be removed in from two to four hours. It may be reintroduced if necessary.—*Jour. A. M. A.*

PURE CARBOLIC ACID IN DISINFECTION OF WOUNDS.—A great many surgeons do not use carbolic acid in its pure state for fear of carbolic acid poisoning. For the same reason many refuse to use it in burns. Other things being equal the danger of carbolic acid poisoning increases in proportion as the solution used is diluted. In the concentration of the solution lies its safety.

Strong carbolic acid when brought in contact with the tissues produces an indissoluble albuminate. Used to disinfect wounds it should be applied full strength for about one minute and then neutralized by pure alcohol. In burns it should be applied also in full strength and an absorbent dry dressing applied. The surface, if weeping, should be dried before the acid is applied. Several applications may be necessary in order to produce the white film desirable before the dressing is applied. The dressing having been applied is allowed to remain undisturbed until epidermization is complete, or until its removal is called for by discharge, pain, etc. The value of carbolic acid in the treatment of infected wounds and in the treatment of burns is not as generally understood by the profession as it should be. Porter.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

EXTENSIVE LOSS OF VITREOUS WITH RECOVERY OF GOOD VISION.—Dr. S. Mitchell, in the June *Ophthalmic Record*, reports a case in which a man thirty-two years of age was injured by a flying 60 D wire nail, the sclerotic being penetrated, the wound

being one-fourth of an inch long and extending from the sclero corneal border upward and inward in the upper nasal quadrant. There was a slight prolapse of the ciliary bodies at the point of injury, and a large bead of vitreous was protruding through the wound. The eyeball was very soft, showing that considerable vitreous had escaped. The protruding vitreous was snipped off, and the wound thoroughly cleaned and sterilized. No pain and but little reaction followed the injury, and the patient gradually recovered 18-20 vision with correcting lenses and read Jager number 1 at 8 and 15 inches.

PILOCARPIN IN THE TREATMENT OF EYE INFLAMMATIONS.—Dr. H. F. Hansell, at a recent meeting of the ophthalmological section of the College of Physicians of Philadelphia, reported cases and gave in detail his method of using pilocarpin in the treatment of inflammations of the eye. The cases were those of interstitial keratitis, traumatic purulent iritis, vitreous opacities and retino-choroiditis. In most of the patients the improvement had been most rapid and marked, while in all the treatment had proved beneficial. He expressed regret that the treatment had not been more generally followed in chronic deep-seated ocular inflammations where the usual routine treatment was most prolonged or unsuccessful, and felt sure from his increased experience that many of these forms of inflammation and of loss of vision could, with few exceptions, be materially improved. The recovery in some of the cases described was most satisfactory. The most striking was that of Case No. 1, of traumatic purulent kerato-iritis, in which the intense injection had decidedly cleared and the large collection of pus in the anterior chamber altogether disappeared in twenty-four hours, with complete recovery in one week.—*Oph. Record*, June, 1901.

CORNEAL ULCERS OCCURRING WITH TRACHOMA.—At a recent meeting of the Denver Ophthalmological Society, Dr. W. C. Baine read a paper upon this subject. He thought this was one of the most painful and protracted forms of corneal ulcer. It was usually situated in the upper third of the cornea near the temporal, or nasal margin, and gradually extended in an irregular crescentic curve across the cornea, leaving an opaque line in its wake. Occasionally there will also appear a small ulcer near the lower corneal margin, while the upper one is extending. These ulcers do

not perforate the cornea, but leave more or less cicatricial tissue to mark their path. These ulcers invariably leave facets, which lower the vision very much when they happen to be in the center of the cornea. While nearly all authors refer to trachomatous ulcers, little is said of their treatment. He believed that copper should always be applied to the lids when a corneal ulcer arises in trachoma. Cleansing the nasal passages with an alkaline and antiseptic wash will often aid materially in bringing about recovery. Locally, Dr. Baine uses holocain to relieve pain and either cures the ulcer or touches it with carbolic acid every other day. He had often seen cases greatly benefitted by the daily use of glycerole of tannin.—*Oph. Record*, June, 1901. (We have had very satisfactory results from the use of pure ichthyol, the ulcer being touched with a very small quantity on a cotton-tipped probe.—Ed.)

GLAUCOMA IN A CATARACTOUS EYE FOLLOWING CATARACT EXTRACTION IN THE OTHER EYE.—Dr. H. N. Rafferty, in the *Jour. of the Amer. Med. Assoc.* of June 15th, reports a case of a woman aged 80, who had binocular senile cataract, the left eye being successfully operated upon and the right eye developing acute glaucoma 53 days after the cataract extraction in the left. A broad peripheral iridectomy produced satisfactory results.

THE RELATION EXISTING BETWEEN DISEASES OF THE CONJUNCTIVA, NOSE AND THROAT.—Dr. H. H. Brown, in the *Jour. of the Amer. Med. Assoc.*, June 15th, says that he thinks that our text books and literature do not devote enough attention to the relation which exists between the conjunctiva and the mucous membrane of the nose and throat, and as a consequence faulty results are sometimes obtained in the treatment through neglect to recognize this important subject. He thinks that when one stops to consider the intimate anatomical relations which exist between the lachrymal and conjunctival membranes, it cannot be doubted that an inflammation within the nasal chambers has an important influence upon the development and progress of inflammatory conditions of the ocular and palpebral conjunctiva. The ophthalmologist therefore who is treating conjunctivitis must constantly bear in mind that he is not treating an isolated tissue, but rather one which is by continuity, blood and nerve supply, inseparably related to the mucous membrane of the nasal cavities. If therefore we add to the treatment of conjunctivitis, treatment of the mucous membrane of the nasal chambers, the results will prove much more satisfactory.

EXTIRPATION OF THE SUPERIOR CERVICAL GANGLION OF THE SYMPATHETIC IN THE TREATMENT OF GLAUCOMA.—Ziehe and Axenfeld (*Sympathicus-Resektion Beim Glaukom, Halle, a. S. 1901*), after an admirable discussion of this subject and a complete analysis of the literature and the cases reported up to date, come to the following conclusions, which, somewhat condensed, are here reproduced.

“Extirpation of the sympathetic, that is, extirpation of the superior cervical ganglion, as well as resection of the sympathetic nerve, in the hands of competent surgeons is a comparatively safe procedure. Among seventy-four cases of glaucoma submitted to this operation there was only one fatal result. Detriment to the eye is up to this time not positively proved.

2. If the material at present available does not suffice to pass judgment upon the durability of this procedure, it still permits it to be said that a certain number of glaucomatous eyes can be improved for many months by such resection, while in other cases a checking of the process seems to have been obtained. It is quite impossible to prophesy that extirpation of the sympathetic will be of advantage in each case, but it is not certainly proved that it will occasionally do harm. When the operation has been followed by a good result this in the majority of cases has remained, whether permanently or not cannot be stated. It is rare that a primary improvement gives place to a late relapse.

3. Referring to the different forms of glaucoma, the following may be stated: (a) In acute inflammatory glaucoma resection is to be rejected, except when iridectomy is declined, or when on the first eye the operation has resulted badly; that is to say, when, in spite of the iridectomy, the glaucoma continues or relapses. (b) In hemorrhagic glaucoma resection is a proper procedure. (c) In chronic inflammatory glaucoma and in simple glaucoma a number of good results have been observed. Resection is therefore worthy of recommendation as a supplement to iridectomy in progressive cases.

4. Extirpation of the sympathetic for non-iridectomized eyes is, in general terms, not suitable. Resection should not, even in chronic and simple glaucoma, supplant iridectomy. Iridectomy holds the first therapeutic place. Extirpation of the sympathetic without previous iridectomy appears permissible only when iridectomy or sclerotomy is refused, when iridectomy has resulted unfortunately in one eye, in hemorrhagic glaucoma, in those cases

of simple glaucoma where a very great disturbance of vision already exists; and perhaps also in hydrophthalmos, although in this disease multiple sclerotomies are to be considered.

5. In absolute glaucoma extirpation of the sympathetic is indicated only when the blindness has existed for a short time, or when the disease is affecting the last eye. If complete blindness has existed several weeks, and severe pains are present, enucleation is indicated, and only when this is declined extirpation.

6. Inasmuch as after extirpation glaucoma continues in some cases, and furthermore, as inflammatory attacks may appear after this operation, it is wise in the after-treatment to continue myotics.

7. Whether extirpation of the sympathetic can prevent glaucoma has not been safely established.

8. Anatomical examination of the excised ganglia shows changes which, while not characteristic of glaucoma, are worthy of further investigation.

9. The final conclusion is that in all cases in which our hitherto employed therapeutic measures are not effective, extirpation of the cervical sympathetic is a measure justifiable and worthy of employment, even if improvement is not certainly to be expected from the operation.—*Oph. Record*, June, 1901.

THE AQUEOUS EXTRACT OF CLOVES IN THE TREATMENT OF CORNEAL OPACITIES.—Krantchenko (St. Petersburg Thesis, Abstract *Archiv. d'Ophthalmologie*, December, 1900) comes to the following conclusions:

1. The aqueous extract produces a favorable effect in corneal opacities and augments the visual acuity. The influence of this substance is more pronounced the more recent the affection.

2. Inasmuch as this substance produces an irritation, even if it is a very slight one, it is necessary to abstain from applying it to cases of acute inflammation affecting the anterior segments of the eye.

3. The amelioration of vision is obtained as well in superficial as in deep opacities of the cornea. This amelioration is owing to a clearing and a disappearance of the corneal opacities, thanks to the absorption of the infiltrations which constitute the leucomas, not yet consolidated on the one hand, and to the return of the vitality of the atrophic foci in the proper tissue in the cornea on the other hand, this phenomenon being due to repeated hyperaemias provoked by the application of the medicament.

4. The aqueous extract of cloves also ameliorates vision in cases which have proved refractory to other agents used for the purpose of clearing the cornea.

5. In total cicatricial leucomas of the cornea it is necessary to persevere with the application of this therapeutic agent with the intention of preparing an area favorable for optical iridectomy.

6. In diffuse superficial opacities of the cornea it is preferable to practice the instillation of some drops of the extract twice a day, morning and evening, and repeat the instillation at each seance with an interval of five to ten minutes.

7. In circumscribed macules one can profitably combine the instillation of the medicament in the conjunctival sac with immediate touching of the affected part by means of a brush dipped in the same solution.

8. In very sensitive persons the instillation of the extract may be preceded by cocainization in order to prevent pain, even if this is of short duration.

9. A single prolonged application of the aqueous extract of cloves does not produce unpleasant results on the eye.

Krantchenko has applied the extract to sixty-two corneas and secured satisfactory results. The patients in question perceived amelioration at the end of seven to twelve days, and at the same time, or a little later, one could prove this by objective examination.

The extract is prepared in the following manner: Take 1,000 ordinary cloves and put them in a large vase and upon them pour distilled water. Then agitate the whole, and after allowing the contents of the jar to become quiet it can be seen that part of the cloves go to the bottom of the vase and the other part swim upon the surface of the water. Then take the cloves which have fallen to the bottom of the jar and dry them between leaves of blotting paper. After having stripped the cloves of their cortex, put them in a small coffee mill and reduce them to a coarse powder. This powder is preserved in a flagon of glass hermetically sealed. To obtain the extract put this powder in a small mortar of porcelain and pour upon it distilled water in the proportion of 1-15, and at the end of fifteen minutes grind them from three to four minutes. After this pass the resulting mixture through a filter. The liquid obtained in this manner is slightly opalescent, has a burning taste and a reddish-yellow color. It is this liquid which the author uses for the purpose described.—*Oph. Record*, May, 1901.

BOOK REVIEWS.

INTRODUCTION TO THE DIFFERENTIAL DIAGNOSIS OF THE SEPARATE FORMS OF GALLSTONE DISEASE.—Based Upon His Own Experience Gained in 433 Laparotomies for Gallstones. By Professor Hans Kehr, Halberstadt. Authorized Translation by William Watkins Seymour, A. B., Yale, M. D., Harvard. Formerly Professor of Gynecology in the University of Vermont; Fellow of the Am. Asso. of Obstetricians and Gynecologists; Surgeon to the Samaritan Hospital, Troy, N. Y. With an Introduction by Professor Kehr. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut Street. 1901. Price \$2.50.

This volume of 370 pages is divided into two parts, and an appendix.

Part I consists of four lectures.—Lecture 1. Pathology and Pathological Anatomy of Cholelithiasis. Lecture 2. The Anamnesis and Examination in Cholelithiasis. Lecture 3. The Special Diagnosis of Cholelithiasis. Lecture 4. The Treatment of Cholelithiasis.

Part II, contains one hundred clinical and operation histories with an introduction in which is given the author's results in 409 operations for gallstones, and in which the question as to who should operate is discussed. In the appendix is given the histories of the 18 gallstone operations done between April and May, 1899, and Reidel's inflammatory jaundice and infection of the biliary system is discussed.

We know of no man with so large an individual experience in gallstone surgery as the author of this work has had. The next largest known to the writer is that of Mayo Robson, who had done 305 operations at the time the last edition of his work appeared.

The author recognizes only two methods of treatment as successful—either "A Carlsbad cure or an operation." That no medical treatment is worthy of consideration in these cases except the Carlsbad cure we are inclined to doubt. The author is of the

opinion that not all patients with gallstone disease should be operated nor should all be "sent to Carlsbad." One must individualize and base the treatment upon the form of disease present. Exploratory incision is sometimes necessary, but as one perfects himself in the diagnosis of this disease the necessity for exploratory incision grows less. No one should make an exploratory incision who is not competent to deal with whatever conditions are formed. Gallstone patients may have most violent attacks of colic after all stones have passed. Palpation is a more reliable method of examining gallstone patients than percussion.

"Never ought a doctor to make the attempt by an exploratory puncture to learn the contents of a palpable tumor. *He would be guilty of a technical error.*" All operators will agree we think with this quotation.

Obstruction of the common duct by stone has rarely been found to lead to distention of the gall-bladder while obstruction due to a tumor usually does so.

"Fourteen per cent. of all gallstone patients sicken of cancer of the gall-bladder. Given a diagnosis of gallstone disease and a predisposition to cancer an early operation is demanded. While trauma can not produce a gallstone it may set up an inflammation which will set a pre-existing stone in motion and thus produce gallstone colic. Gallstone colic has for its immediate cause inflammation. A translation less literal would have resulted in a more finished literary production, but would have robbed the work of its charm of personality.

All progressive surgeons will read the book, all members of the profession should do so. .Porter.

PRINCIPLES OF SURGERY.—By N. Senn. M. D., Ph.D., LL. D., Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago; Professorial Lecturer on Military Surgery in the University of Chicago; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief of St. Joseph's Hospital; Surgeon-General of Illinois; Late Lieutenant-Colonel of United States Volunteers and Chief of the Operating Staff with the Army in the field during the Spanish-American War. Third Edition. Thoroughly Revised with 230 Wood Engravings, Half-tones and Colored Illustrations.

Royal Octavo. Pages, xiv—700. Extra Cloth, \$4.50, Net; Sheep or Half Russia, \$5.50. Net. Delivered. Philadelphia F. A. Davis Company, Publishers, 1914-16 Cherry Street.

The first edition of this work was published in 1890, that the third edition should have been called for thus early speaks volumes for the popularity and character of the work. It has long been a standard text-book.

The present edition has been thoroughly revised and many editions have been made. Chief among the latter is a well illustrated chapter on "Blastomycetic Dermatitis," and a chapter on "Degeneration." The latter very properly follows the first two chapters of the book on "Regeneration." Having reviewed the preceding editions in detail we deem it unnecessary at present to do more than call attention to the improvements and additions which have been made in this edition.

No student or practitioner in need of an up-to-date text-book on the principles of surgery (and all who have none are in need of one) can do better than to buy this one. Porter.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

PHYSIOLOGY THE BASIS OF CLINICAL MEDICINE: A PLEA FOR SCIENTIFIC METHODS. *

By G. W. McCASKEY, A. M., M. D.

Professor of Clinical Medicine, Etc., Fort Wayne College of Medicine.

It falls to my lot this evening, in obedience to the traditions of the past, to address you upon some topic of my own selection. It has been a somewhat general custom on similar occasions, to consider problems more or less distinctly removed from our daily professional life. This has been of course due to the composite character of the audiences with which we are at such times greeted, and which indicate the deep, and it might well be, even pathetic interest which the lay public must always feel in medical events. It is precisely because of this intelligent interest, and the intellectual breadth and culture which it implies, that it appears to me unnecessary to evade the real questions of the day out of fear that they will fail to catch and hold the attention of those who by their very presence have declared their interest in them. I have felt myself, therefore, viewing the matter in this light, quite unrestrained in the choice of topics, within, of course, certain obvious limits, readily

*President's Address before the Indiana State Medical Society at South Bend, Ind.
May 16, 1901.

suggested by the proprieties of the occasion; and I have chosen that which appears on the program, because in my own sphere of action it appears to me to be absolutely paramount.

To have witnessed and in some degree participated in the social and scientific evolution of the last quarter century; to be able to revel in the intellectual and scenic splendors of the present and look backward through the avenues of memory and recorded history upon the unfolding past, are among the great privileges of the passing hour. In their contemplation the human heart must swell with pride with such portents of the greatness of human destiny. Though man was "Born to be ploughed by years, and sown with cares, and reaped by death" yet there is that within him which is forever rising above the dust and the din of the conflict, with resistless and imperishable power; ever moulding and creating for himself a new environment—a new and higher plane of existence on which his attributes may find a fitting sphere of action. It is not my ambition to attempt the task, impossible to mortal eyes, of reading the horoscope of a new born century; but all the discernable signs, as I see them are pregnant with benificent promise; and in every aspect of human life there is ample evidence to prove that the great mass of humanity is steadily rising on "the stepping stones of their dead selves to higher things". Nowhere is this evolution toward a higher type—this uplifting to a higher plane—more conspicuous than in the domain of medicine. The ceaseless effort to attain a higher success in the battle against disease; to discover new weapons for the conflict; to reveal the hidden nature of disease processes; these with many others like them are the common purposes which animate the medical profession.

It would be a pleasant task to recite the brilliant triumphs which have been achieved, and which have become the heritage of the future. To dwell upon anaesthesia, upon antisepsis and its greater progeny of asepsis. To fondly linger over the trophies which lie at the feet of the general clinician, the surgeon and the practitioner of state medicine, would be to point out some of the most important discoveries of the last century, and mark the immeasurable broadening of the highways of human knowledge. But this has often been done before.

Medicine was born of empiricism and nurtured in superstition from which its emancipation has been slow. I need only remind you of the votive inscriptions on the walls of the Egyptian temples at Memphis as a historical proof of this statement. Medicine

could only become and did only become a science when the scientific spirit took possession of the intellect of man and he began to take the isolated facts of experience and observation and classify and compare them; for this is what constitutes a science.

Both the science and the art of medicine are in a transitional state. They always have been, and perhaps always will be. In this respect they are precisely like all other branches of human knowledge dealing with the phenomena of nature, our knowledge of which may continue to approximate but never reach completeness.

The conception of physiology as a distinct science is of course a modern phenomenon. Originally the word physics had reference to the entire range of living phenomena, precisely the reverse of what now obtains. It was used in this sense by the ancient Greeks, and especially Homer. At present, however, physiology has been practically restricted to that science which deals with the function of living organisms under normal conditions, and it necessarily furnishes the standards by which the practical physician must judge of those perverted conditions which we call disease.

The dominant idea of an especially close and practical relationship between physiology and clinical medicine dates within the present century, and was represented by the so-called school of "Physiological medicine" founded by Rosser of Stuttgart, followed by Griesinger and Wunderlich. The ideas of this school were, perhaps, rather more of a theoretical than practical nature. They held that physiology included all vital phenomena of disease with which the science of medicine had to deal, were nothing more nor less than modifications of normal physiology—a view which, when made to comprehend the role of micro-organisms, may be said to closely coincide with the best thought of today. The dawn of physiological medicine in its truest and broadest sense, is almost coincident with the dawn of the twentieth century, and it will be its greatest task, and possibly its greatest achievement in the domain of medicine to interpret the phenomena of disease in strict accordance with the laws of physiology considered in their broadest sense; and to make an intelligent application of available therapeutic resources toward producing a transformation of the physiological phenomena of the condition known as disease to those of the condition known as health.

It is a familiar and fully accepted proposition of physiology that the cell is the fundamental unit of life both structurally and functionally. The phenomena of cell life epitomize the phenomena

of the life of the more or less complex organism of which the cell forms a part. The cell can secrete and excrete; within its narrow compass occur all the complicated chemical processes which represent the genesis, the storage and the liberation of those forces, the varied play of which is life. It is the unit of function as well as of structure. When we say that a muscle contracts, we simply express the fact that each one of a million elongated cells, invisible to the naked eye, incapable singly of moving a grain of sand, has shortened its longitudinal diameter, and by so doing has shortened the muscle with the expression of a resultant force. When we say that the liver secretes bile we mean that each of a million cells has selected from the fluid which circulates around it, the material which it desires, if I may so express it, and within its microscopic laboratory, by complicated analytical and synthetical processes concerning which the chemist can tell us but little, it has rearranged the atoms to suit its purposes, and has thus molecule by molecule formed this important secretion. The cells of the salivary and other glands, immersed in precisely the same circulating fluid which fills the cellular interstices of the entire body, select the material which they in their turn need, and from it by certain molecular changes form their products. The most expert chemist cannot imitate the chemical processes which are constantly going on in these and other cells; indeed he cannot even trace the processes and tell us what they are. But there are others more wonderful still. In the nervous system of the higher order of animals, and especially in that of man there are cells which take the same molecules supplied to liver and salivary gland cells, and by some mysterious processes transmute them into what we call nerve force. This is done within the same microscopic mass of protoplasm called a cell.

In short the farther we go in this inquiry the more clear it will become that the important chemical processes of the body take place within the structure of cells. These processes represent the ultimate analysis of vital phenomena both in health and disease. It will help us as practical physicians to remember that human life is but the summation of cell life, and that we are what our cells make us. The highest expression of human life can only be manifested when the individual cells of the organism are in the highest attainable condition of structural and functional integrity. This is absolutely true under all circumstances, it matters not whether the product of

cell activity is to be an Illiad or a submarine telegraph on the one hand, or a cord of wood, or an acre of beans on the other.

Starting with these fundamental and incontestible postulates of science, we may say in a general way that the problems of clinical medicine are in a large sense identical with the problems of cell structure and cell function. The great questions of clinical medicine may then be thus outlined, What are the conditions which favor the maintenance of that highest degree of structural and functional integrity of cell life which we call perfect health? What are the conditions and influences which lead to those perversions which we call disease? and finally, What are the agencies at our command which can be used to aid nature in the restoration of morbid to normal conditions?

I can only indicate the general lines along which their solution lies. Cell life is only another expression for certain molecular changes in the structure of the cell body, both of a destructive and constructive character. By the rearrangement of the atoms in the very complex molecules which make up the most highly organized forms of living matter, certain other forms, less complex in character result. In the readjustment of atomic relations from more complex to simpler forms of matter force is liberated—the dynamics of life are manifested—the expression of force being in the form of nervous energy, secretory power, muscular contractions, etc., according to that unknown factor which we in our ignorance are pleased to call function. The working capacity of a cell is exactly proportioned to the amount of retrograde molecular change which can take place within its body. After a cell has done any work whatever of any kind, until there has been a readjustment of the molecular structure; until its lower molecules have been replaced by higher ones—there is less potential energy within that cell, just as certainly and by a law just as absolute, as that which decrees that when I have poured out some of the water contained in a glass there is less in it than there was before.

In order that the cell may be kept up to the highest standard of functional activity two things are necessary: 1st. After any expenditure of force the debris—the ashes and the cinders of combustion which resulted in the evolution of force, must be removed. 2nd. New molecules of the required complexity of organization must take their place. In other words, there must be adequate elimination, and an ample supply of food pabulum in a properly elaborated and assimilable form.

The cell, be it remembered, is the epitome of the human organism with which clinical medicine has to deal. That which will maintain the cell in the highest standard of health will, with perfect certainty, do the same thing for the organism of which it is a part. The first duty of the clinical physician, therefore, is to see to it that there is, first, a proper supply of everything required in the phenomena of cell life; proteids, carbohydrates, minerals, water, oxygen; and then to see that the products of combustion are removed.

That which, I will for lack of a better term, call molecular inertia, cannot exist in the living cell, anywhere in the series of organized life from the monad up to the man. The molecules in a globule of mercury, a drop of water, or a grain of sand, if left free from the impress of external forces would, we have every reason to believe, remain unchanged for a million milleniums. The molecules of the living cell, on the contrary, cannot remain unchanged for a moment of time. The very essence of its life is molecular change, and for this to cease is for the cell to die. What is true of the cell is true, with certain limitations, of the organs and structures which they form. The functions of the cell communities, which form the organized being must be exercised, or debility, decay and finally death will inevitably result. We are familiar with the muscular weakness resulting from lack of muscular exercise. If the stomach glands should not be called upon to secrete gastric juice, their power to do so would gradually diminish, and finally be lost, and the glands themselves would atrophy and disappear. This is an invariable rule, and reaches, in fact, the dignity of a great fundamental law, which forms one of the underlying principles of Darwin's theory of natural selection. The vestigial organs of certain animals are but the atrophied remains of fully developed but unused organs in their progenitors, the atrophy being perpetuated and accentuated by the laws of heredity.

The importance of functional activity on the part of cell organs and tissues, thus stands out in bold relief, from the standpoint of clinical medicine. If time permitted numerous illustrations could be cited. I will only mention a few. The respiratory function, because of lack of sufficiently vigorous exercise, becomes reduced to a degree of weakness which makes it barely subservient to the needs of a more or less vegetative existence. I frequently find patients with a total respiratory capacity of not more than 75 or 100 cubic inches when they should have at least from 200 to 300. Not only so, but, what is more important the tidal volume of ordin-

ary respiration becomes less and less, and the supply of oxygen for the chemical processes of the body becomes correspondingly defective. Under such conditions, resistive power is lowered and many diseases, especially tuberculosis, directly invited, and the working capacity of the individual is greatly diminished.

The same thing is true of the circulation. A heart that is not called into active exercise of its functions, and especially if this is associated with imperfect respiratory functions, as it is very likely to be, has but little reserve power, and becomes less and less able to cope with the emergencies of life, such as a pneumonia, or a sustained test of physical endurance rendered necessary for instance by some imminent danger. Its relation to the functional integrity and power of the entire organism will be more fully pointed out.

All function must be intermittent. This is invariably true of the genesis of force within the cell. Molecular change, either constructive or destructive is incessant during the life of the cell; but the evolution of power is never so, and cannot be. The apparent exceptions, such as that seen in the heart, are only apparent and not real. The intermissions of function are short in the case of the heart, but they occur once about every second, and last longer than the period of work.

There are and can be no exceptions to the law of intermittent function. There must be, and there always is, the alternating periods of rest and work. The relations between the two is in some instances, such as the heart, regulated by automatic control, beyond the power of the will. Within certain pretty wide limits, however, it may be said that the general regulation of function which is but another name for the genesis and expenditure of force—is under the complete control of the will and subject therefore, to the errors and caprices of human judgment, to say nothing of the storms of passion which surge up and down the shores of the human soul. It is therefore important that there should be a judicial and intelligent regulation of life; that there should not be a hibernation of function on the one hand nor a reckless excess on the other, for overwork is quite as pernicious in other ways.

The problems of the chemistry of the human body are at once the most difficult, and the most intensely practical of any that confront the clinical physician of the twentieth century; indeed I think I may safely add, of any that can engage the attention of the scientific world for they concern human health and life and nothing

can be higher. The law of the transmutation of force, which has become a fundamental dogma of science, enables us to comprehend the convertibility of chemical into so-called vital phenomena. Indeed this is as far as we can go in our ultimate analysis of life, from a materialistic point of view. Beyond this science cannot go. Its limitations are sharply defined. It is idle from a practical point of view to discuss questions of belief as to the nature of life. These are beyond the domain of science, although it must not be forgotten that it is possible to utilize belief, through the agency of suggestion, as a powerful therapeutic agent, as conspicuously illustrated in hypnotism and Christian Science. This, however, is quite apart from the real question under discussion, and clinical medicine in the light of the best grounded scientific thought, is justified in assuming that every phenomenon of the living organism, is, in a certain sense, the product of a cognate and correlated chemical process. In other words there is no such thing, so far as we know, as a life process in the absence of a chemical process. It follows from this that there must be a close correspondence between the chemistry of the body and the functional integrity of the organs and tissues; that, in fact, the former, if it could be fully comprehended, would be the absolute key to the latter. Clinical medicine, therefore, is deeply concerned in these problems. It is especially important that it should throw the search light of science upon these processes as they occur in the human body, and take full note of the accessible evidence bearing upon the chemical problems concerned.

It will be impossible to enter into details with reference to the many aspects of these questions concerning the chemical phenomena of nutrition which we call metabolism. An adequate consumption of nitrogen, with a proper balance between its intake and output are among the most important points of observations. Another one is the proportion to each other of the different forms of nitrogenous waste, which, in reality bear a pretty constant relation to each other. The excretion of phosphates, chlorides and sulphates, and the precise combinations of the last mentioned with certain aromatic principles formed in the lower division of the alimentary tract furnish valuable information as to the departures from the normal standard. The physiological chemistry of the body as interpreted by clinical data thus becomes in a large measure the sign board of clinical medicine and points the direction and in some

measure indicates the distance to the goal of health. All along the road it stands as an indicator of the measure of success which is attending our efforts in the patient's behalf; and the final restoration to health is often better indicated in this than any other manner.

The physiology and histology of the blood has of late years, thanks to the labors of Ehrlich and an ever increasing army of workers following in his path, become a fruitful field for the clinical physician. With one or two drops of blood obtained from a small puncture in finger or ear, it is sometimes possible for the skilled diagnostician to at once, and independently of all other sources of information settle the pathology of an otherwise obscure case. It is no longer sufficient to say that the patient has anaemia—give him iron. What sort of anaemia has he? Are the red cells individually rich or poor in red coloring matter? In the most fatal form of anaemia known the red cells may have individually too much iron. Are the red cells nucleated, showing a marked activity of the blood making organs, or is there no such attempt on the part of the organs to supply the need for blood. If nucleated cells exist are they of normal size, or are there those among them of giant size, with their sinister note of prophecy in the case? What about the white cells? Are they in excess indicating a violent and effective reaction on the part of the organism against an invading infection, or are they deficient indicating that there is no need for such reaction, or that the enemy has scaled the ramparts, and that the defensive forces of the organism have capitulated. I recently saw in consultation with a general practitioner a patient convalescing from typhoid fever. I examined the blood and found 25,000 white cells to the c. m. m. There was nothing definite to fix upon, but I said "Look out for breakers" there's trouble just ahead. In forty-eight hours a fully developed pneumonia had declared itself.

Turning in another direction we find certain conditions of physiologic phenomena of a mechanical nature.

Of these perhaps the most vital is the tension or pressure of the circulatory fluid, which acts as the double carrier of nutrient material to, and debris from the tissues. If this tension falls below a certain minimum standard, function becomes progressively impaired; the standard of health is lowered and disease exists; if it rises above certain well defined limits, danger ensues. This tension is primarily dependent upon the force of the hearts contraction, and secondarily upon the resistance offered by the blood vessels,

and varies inversely with the size of the latter. It will thus be seen that the problem of the blood tension, so important to function, has largely to do with the cellular conditions of heart muscle and vascular walls, and, of course, the proper innervation of the latter. It is the duty of the physician to take cognizance of these pressure conditions and see that they are neither excessively high nor low, as danger lies in either direction.

Again, the conditions of the nervous system play a paramount role. It dominates every function of the body in many ways; but conspicuously by its direct control of the cardio vascular mechanism, upon the proper adjustment of which all function depends. That intangible thing which we call nerve force is the most expensive commodity from an economic standpoint, in which the human organism deals. A thought represents more beefsteak than does a muscle contraction. It was a great truth which was uttered by Mirabeau from the forum of that notable French assembly when he thundered forth that "Words are things". They are indeed or may be the most concrete and costly things in the world, and their lavish waste proves nothing to the contrary. An emotion may arrest the digestion of a full meal, and persistent overstrain of the nervous system often produces chronic disease of the stomach, at first functional but later structural in character, with great certainty.

In short it should be remembered that the nervous system dominates the situation with a tyranny more absolute than that ever dreamed of by a Ptolemy, a Caesar or a Czar. This becomes more and more true as we ascend the scale of animal life, and only reaches its highest expression in man. One nerve center rises above another in authority and power like the ranking officers of a modern army. The supreme command of volitional phenomena is vested in the anterior lobes of the brains; but in the lower centers in the basal and other brain structures, the spinal cord and chains of sympathetic ganglia on either side of it, there exist many automatic nervous mechanisms which regulate the various organic functions by methods of marvelous accuracy and complexity. By the mandates of these centers, in response to telegraphic information received from scouts in the field a muscle will be made to contract, or a gland cell to secrete, an organ will be deluged with blood or blanched with a local anaemia; nutritional and other processes will be stimulated on the one hand or inhibited on the other. A muscle fibre will disappear in a few weeks. if its nervous connec-

tions are severed, and even the structure of bone may be changed through the influence of the nervous system as seen in the arthropathies of tabes.

The importance of husbanding the resources, and conserving the tonicity of the nervous system must be obvious to the merest tyro in clinical medicine but I can proceed no further along these lines.

Now, what of all this refinement and super-refinement of physiological lore in its relation to clinical medicine? Does it pay? Is it worth the trouble? A thousand times yes. The clinical physician does or should occupy the position of the commanding general in the field. He sees all that his trained eye and his field glass will enable him to see. He sends out his scouts; he orders a reconnaissance in force; he discovers a vulnerable point in the enemy's line of defence yonder, or an impregnable spot somewhere else; he learns of preparations for an impending general engagement, or possibly a beginning retreat. While thus engaged he is feeling the enemy's pulse, he is testing his vision and his reflexes; he is studying his metabolism; he is, in fact, making a diagnosis of the dynamic force before him, which may serve as his guide to action. It is thus with the physician who realizes and discharges his obligations. With a comprehensive knowledge of the science of physiology, and the modifications which physiological processes undergo in disease he supplements his ordinary powers of observation with the microscope, the test tube, or the incubator; he discovers a leucocytosis or a leucopenia; an indicanuria or a peptonuria; a pathogenic organism or a perverted metabolism. He develops the weak point in the line of defense of the enemy; he forseees and perhaps parries the impending attack; he prevents, perchance, the complete and effective organization of the enemy's forces; he breaks the force of an unavoidable but not unforeseen blow; and, perhaps, by his superior tactics he has defeated the enemy by a strategem and has saved his patient the hazzard and the struggle of a protracted contest; or if this be impossible, he continues to occupy his position of command throughout the battle—he throws upon every inch of the possibly hard fought field, the search light of science, and a trained technical skill—he takes an advantage here, he thwarts an ambushcade yonder, and he will, thus often turn the even poise of conflict in behalf of his patient.

But I hear someone say, this sort of thing is impractical from

a business point of view. If this humiliating confession be true; if it is a fact that commercial consideration, stand in the way of rendering the most effective service to afflicted humanity then it reflects an economic, intellectual and moral status of society which is deplorable indeed. I am not prepared to reject the contention as entirely groundless. We stand in need of a readjustment of the relations between the profession and the public. The individual members of the profession, should in the first place, insist upon discharging his obvious obligation to the individual member of society in whose behalf his services have been invoked. This means more time and vastly more labor than is given to the average case. I have heard physicians boast of having visited, examined and prescribed for 40 or 50 patients in a single day. This is something to be ashamed of rather than cause of self gratulation. More time and labor must be given to cases and of course more compensation must be exacted. Too much work is already done for the compensation given. Physicians coin their blood into nerve force and sacrifice it on the altar of suffering humanity; and they are too often repaid by ingratitude and even vituperation.

I challenge anyone to entertain more exalted notions than I do concerning the sacredness, and the overpowering weight of our obligations; or to feel a deeper sympathy for those depending upon us, but let us no longer disguise the fact that there is a business as well as an ethical relation existing between the profession and the public, and that where the ability to meet it exists one is just as binding as the other. Take fewer patients and give them better service, and demand adequate compensation. By so doing humanity will be better served, our families will be better provided for, our opportunities for higher professional attainment enhanced, and the overcrowding of the profession will have found in some measure its rational remedy—and verily these are consummations devoutly to be wished.

Finally, the great aim, the ultimate object, is therapeutics. Every step in our dealing with patients which does not have this in view, is a digression and a diversion, or something worse. This does not mean that every detail of an exhaustive clinical research is to be or can be, directly utilized. Such a proposition would be absurd. The commanding general in the field gets all the information he can, but he does not give a general order on the basis of every report. Physiological investigation has given us that com-

plete and comprehensive view which makes rational and effective therapeutics possible.

Let us endeavor to get a clear outline picture of our therapeutic resources. By force of habit, the hereditary growth of centuries, dosage by drugs is the first thing which occurs to many. To the advanced scientific physician they are never lost sight of but are kept in the background. Oliver Wendall Holmes declared indeed that if the entire materia medica was sunk to the bottom of the sea it would be better for mankind but worse for the fishes. If this is true, and it is probably something more than a poetical figure of speech, it is because of the tremendous abuse of drug administration by the lay public, and a rather large, but constantly diminishing percentage of physicians. Drugs have their legitimate place in scientific medicine. But the highest conception of therapeutics today rests upon a foundation as broad as the total environment and habits of mankind. Sunshine, fresh air, and exercise; properly prepared and sufficiently diversified food; a strict compliance with hygienic laws, are the great prophylactic weapons of therapeutics and are worth a hundred times more than everything else combined. While these with the natural forces of heat, and cold, of mechanical and electrical stimulation or sedation form by far the most powerful weapons with which to combat actually existing disease.

It is manifestly impossible to go far into detail. We are, however, to work along physiological lines. We will give rest to an overwrought nervous system; we will supply ample fluid for constructive and eliminative processes, in those frequently recurring cases in which it is notably deficient; we will regulate vascular tension; we will stimulate defective metabolism by hydriatics, massage, or exercise; we will utilize intelligently directed gymnastics and deep breathing exercises for their powerful influence upon thoracic and abdominal viscera, and the nervous system; we will avail ourselves of the newer therapy of organic extracts, just as far and as fast as physiological chemistry and experimental physiology, will warrant their use in practical medicine; and in like manner from the commanding view point to which we have been exalted by physiologic methods of investigation, we will utilize every available force, in chemistry, in mechanics, in psychology, to transform perverted into normal physiological processes, which is the acme of clinical medicine.

Such, it appears to me, is our obligation, written in letters as clear as sunlight. The generation that is passed had its own standards but they are not for us. We see no more the once familiar type of that idol, and ofttimes hero of the past, the good old family doctor. His saddle bags and kindly words and beneficent smile were the half divine oracles of a generation whose faltering steps still linger in the fading sunlight of life's golden afternoon. He has virtually disappeared from the stage of action, and is little more than a fragrant memory.

In the light of his generation he did his duty well; and in the light of the twentieth century with its tremendous responsibilities, may we in like manner do ours.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

A FIFTH YEAR FOR THE RUSH MEDICAL COURSE.

The trustees of the medical department of the University of Chicago (Rush Medical College) are now considering the advisability of adding a fifth or hospital year to the medical course as now required. If this plan is carried out the freshman and sophomore years will be spent in the laboratories of the University proper, the junior and senior years will be spent in the lecture rooms, laboratories and clinics of the medical department of the University, or Rush College, and the extra senior or fifth year will be spent as an interne in the hospital, at the completion of which the degrees will be granted. There can be no doubt that such a plan, if followed, will result in producing the highest type of medical graduates.

STREET CLEANING IN CITIES.

The inhabitants of the cities of the United States might study with profit municipal government as it exists in some foreign

cities. In some parts of London, for instance, the refuse from the streets is consumed in creating power to run a lighting plant which furnishes light so cheaply that the very poor can afford to use it. **The lights** are operated by slot machines. The result is that those **who could** not otherwise afford it have well lighted houses and enjoy clean streets and alleys with less burdensome taxes than they formerly paid to live amidst filth and in dark or inefficiently lighted homes.

Glasgow keeps her 315 miles of streets clean and realizes a large profit from the refuse. The Glasgow Street Cleaning Department controls 800 acres of farm land, employs 1,300 men, owns 900 railway cars, 300 horses and a large number of carts. The refuse is divided into four classes. Iron, tin and paper are sold. Stable manure and refuse from abbatoirs are mixed in proper proportions and sold as a fertilizer at a good profit. Ashes and street sweepings are scientifically mixed with excremental matter and sells readily as a fertilizer. Useless matter is consumed in furnaces. The civic government of Glasgow is now considering a scheme by which the heat developed in consuming this waste is to be utilized in running an electric light plant. It is estimated that the volume will be sufficient to generate 890 horse-power of steam an hour, enough to light 600 street lamps of 2,000 candle power each. The profit of the Street Cleaning Department of Glasgow for the year ending May, 1899, was \$385,000. It may not be amiss to call attention to the fact that such results as are above referred to can be obtained only by adhering strictly to business principles in managing the affairs of a city, just as one must do if he succeeds in the management of a workshop, a bank, or a store. Partisanism pays the few and robs the many, politics (business) pays the people and robs no one, unless it be that it robs the pot-house politician of his job, and robbery such as that is a virtue and not a vice. M. F. P.

THE INCREASE OF DOCTORS.

Statistics show that the increase of physicians is far in excess of the increase in any of the other professions. There is at the present time one physician to less than every 600 of the population of the United States, and this ratio is being yearly reduced by the hundreds of medical graduates turned out of the numerous medical schools in the country. It has been shown that with our present annual increase of population, and proper reduction for mortality,

there is room for about 3,000 new doctors each year. Our 160 medical colleges turn out annually a crop of nearly 6,000 graduates, or over 2,000 more than can be provided for. This number does not include the vast number of off-color practitioners, who nevertheless have their share of public patronage and thus serve to curtail the means of support of recognized physicians.

These facts as brought out by the *Journal of the American Medical Association* ought to set us to thinking, and lead us to a more general adoption of a plan to discourage young men from beginning the study of medicine. It cannot be doubted that almost any other profession, with a less expenditure of time, energy and money, offers more inducements than the medical profession in the way of a certainty as to a comfortable income. Why so many young men should select the medical profession in preference to the various branches of mechanical, electrical and civil engineering, which today offer such a broad and unlimited field for advancement, is beyond understanding, except on a mistaken theory that the physician's life is an easy one, and the remuneration large for the time and energy expended.

Already we hear of physicians with integrity and education eking out a bare existence in the practice of medicine, owing to the competition on every hand from an over-supply of doctors. It cannot be doubted that with a continuation of this state of affairs the practice of medicine will soon be more or less reduced to a trade instead of a profession, and the remuneration derived will gradually become less and less as the number of physicians, clamoring for work, increases.

It is evident that our educational institutions must eventually recognize this subject by raising the requirements, thus limiting the number of graduates, or be guilty of being the means of creating such a large increase in the number of professional men that dire disaster, through active competition, will result. Our own solution of the problem would be to wipe out of existence about three-fourths of all the medical colleges existing in the United States today, the majority of which have absolutely no good and sufficient reason for their existence, and in elevating the standard of the other one-fourth which would be allowed to exist only because of their superior fitness for producing medical men of the highest type.

A. E. B. Jr.

TUBERCULIN.

The medical profession is familiar with the rise and fall of Koch's Tuberculin. It will be remembered that Koch was unable to keep the secret of his discovery until he had thoroughly tested the remedy and definitely decided as to the actual part it would play in the treatment of tuberculosis. It must also be remembered that when enthusiasts all over the world were loudly proclaiming the value of tuberculin as a curative agent in the treatment of "the great white plague," Koch himself was temperate in the discussion of the subject and particularly urged that the medical profession be not too hasty in passing judgment. In spite of this, however, the most exaggerated statements were published, after the advocacy of the new remedy, and on every hand tuberculin was proclaimed a cure for nearly all forms of tuberculous affections. The general use of the remedy was short-lived, largely through the warning sounded by Virchow and many other prominent investigators who pronounced the new remedy dangerous. The tide of adverse opinion was not stayed, and it required but a few months to place tuberculin in the list of useless, injurious and almost forgotten discoveries. A few, however, retained some faith in the remedy and continued its cautious use. Among this number was Dr. Goetsch, of Slawentzitz, Selisia, who, after ten years of observation in the use of tuberculin, now publishes, at the instance of Prof. Koch, his statistics. The method employed is to give tuberculin in very small doses, 1-10,000, 1-1,000 or 1-500 gms as often as possible to fever-free patients, but avoiding any febrile reaction or unpleasant symptoms. If the size of the doses are such that the patient can receive them without any reaction resulting (the temperature is carefully followed to determine the dosage for each patient) he finds that the general condition improves and that the case is permanently cured in from three to five months. He has recently exhibited a series of sixty-five cures, and thirty-nine cases under treatment, to a company of physicians, including Koch who considers this an approval of the value of his tuberculin treatment. In the series of cases exhibited the diagnosis was made by the history and physical signs, but no case was called tuberculous unless tubercle bacilli were found, or unless there was an unmistakable reaction to tuberculin, and he called no case cured until the tubercle bacilli disappeared and the patient tolerated without reaction a large dose even up to one gram of the tuberculin.

The following rules have been laid down by Goetsch for the use of tuberculin: 1. The treatment should only be begun when the patient is free from fever. 2. The dose should not be increased until the last dose is tolerated without reaction. 3. The patient, on the day of the injection, as well as on the day following, must remain in bed.

It has been found by numerous authorities that this report of Goetsch, and the statistics offered, are reliable and worthy of acceptance. It is to be hoped, however, that in the interest of scientific accuracy that the reported results by Goetsch will be confirmed by reports from others who may have employed the remedy in the treatment of tuberculous affections. If, as now seems probable, tuberculin turns out to be of value as a remedial agent in tuberculous affections, it ought to be a lesson to all progressive and scientific medical men, to the end that no discovery pertaining to medical or surgical science shall receive either the unqualified approval or dis-approval until it shall have been thoroughly tested by the school of experience.

A. E. B.

FOUL CANAL WATER AGAIN.

Little did we think, when condemning the water supply for the city of Fort Wayne in last month's *Journal-Magazine*, that a few days later the daily papers of the city would contain the startling information that the incompetent, if not dishonest water works board of trustees had again turned the filthy and disease breeding canal water into the pipes of the city to be used for consumption by the thousands of people who are not in a position to afford or obtain anything better. It will be remembered that for the past five years there has been a water famine during the summer months, and the people have clamored loudly for some action on the part of the water works trustees that would insure an increase of the supply. For the last two seasons the trustees have attempted to increase the supply, without the knowledge of the people, by forcing into the mains the filthy water from the old feeder canal through a secret pipe. For a number of years the owners of the canal have been trying to force the city to purchase the canal for the very purposes to which the trustees have during the summer months put it. We have even been informed that a contract for the sale of the canal to the city was ready for signatures when the plot was discovered by one of the enterprising newspapers of the city and the howl

of indignation from the people prevented the consummation of the iniquitous scheme. During the municipal election of this Spring it was seen that the water question was bound to be an issue of the campaign, and consequently nearly every candidate for office upon the Democratic ticket (the only one that ordinarily has a ghost of a show in Fort Wayne) issued a statement over his own signature, or gave out an interview in which he stated that he was unalterably opposed to not only the purchase of the canal for use in furnishing water to the citizens of Fort Wayne, but likewise opposed to any scheme which would give to the citizens of Fort Wayne anything but the purest rock well water. The candidate for mayor even announced in the public press that he would sooner cut off his right arm than permit the canal water to be turned into the mains of the city of Fort Wayne. Yet in spite of all these pledges, and the well-known temper of the people upon the question, the water works trustees, with the full consent of the mayor, recently ordered the canal water turned into the mains of the city on the plea that the condition of the reservoir, with its low water supply, demanded such a move.

If there ever was a more contemptible and inhuman move on the part of incompetent and corruptable officials we do not know of it. The water works trustees and all others who are responsible for the outrage might just as well have started through the streets with bayonets, cutting and slashing every human being that came in their way. That the canal water is filthy and disease breeding beyond all estimation, is evident to anyone who will view it as it moves sluggishly down the canal bed in the northern part of the city. That it has been responsible for not only the sickness of many hundreds of people in the city of Fort Wayne, but the death of a dozen or more out of that number, is evidenced by the typhoid mortality statistics for the city of Fort Wayne for the past year.

The plea that it was absolutely necessary to turn the canal water into the mains of the city is absolutely untenable from any point of view. The trustees and other officials of the city of Fort Wayne have been fully aware of the fact that the water supply during the summer months has for several years been insufficient to supply the demand. Yet not one well directed effort has been made to increase the supply except through the medium of the canal already mentioned. It has been clearly proven that rock well water in abundance can be secured, and a company of reputable and financially

responsible citizens of Fort Wayne have volunteered to give a bond to the city guaranteeing that they can procure all of the rock well water which the city can require for the next fifty years. It seems also to have been proven that the water works trustees have crippled the pumping stations during the hot weather with a view to curtailing the supply from the wells and making it seemingly necessary to resort to the canal water to make up the difference.

Even granted that the wells do not give the same amount of water as in the winter months, and that with the increased consumption in summer the reservoir would be lowered to the danger point, there yet is no excuse for the trustees to bring death and destruction to the citizens by turning into the mains such foul and disease breeding water as that contained in the old feeder canal. We venture to say that the amount of water actually wasted in the sprinkling of lawns and streets during the past thirty days amounts to 500 times more than the amount actually consumed by the people. The trustees realized that the supply was diminishing, and that some measures must be adopted to prevent disaster through collapse of the reservoir or lack of sufficient water in case of fire. The demand for heroic measures, however, did not necessarily mean that canal water should be turned into the mains, for the problem might have been much better and more easily solved by the issuance of an edict to the effect that any citizen found using the water for sprinkling purposes would be fined, and that the rule would be enforced for the purpose of preserving a pure and sufficient water supply for consumption by the people. The citizens could even have been allowed to sprinkle for one-half hour each day without the supply being anywhere near reduced to the extent that it was reduced by the many hours of sprinkling which most of the citizens indulged in throughout every day of the protracted dry spell during June and July. We venture to say that had the water works trustees ordered all sprinkling stopped, giving as a reason that unless it was stopped the canal water would have to be turned into the mains, there would not have been one individual in the city to raise a hand in protest, for the feeling among all classes of people is that the lawns and streets might better suffer for want of water than that the people should be made unnecessarily sick and perhaps die through the effects of a polluted drinking supply.

There seems to be but one explanation of the trustees' conduct, and that is that they have been determined to force upon the

city the purchase of the canal, and probably profit themselves thereby. The meeting of the Citizens' Committee, called by the Mayor for the purpose of discussing the water situation, has been the means of pointing out to the trustees not only the necessity of giving the citizens pure water, but the manner in which a sufficient and wholesome supply may be obtained. Our one regret is that there does not seem to be an appropriate and efficient way of punishing the board of water works trustees for not only their incompetency, but their seeming dishonesty and lack of interest in the health and public welfare of the community. Through the citizens' committee we are now promised action in the interest of an increased water supply from rock wells, and it is confidently hoped that another summer season will find us with a supply equal to any and all emergencies. In the meanwhile the people must this season be content to put up with a water supply contaminated with the foul and disease breeding fluid from the canal. A repetition of the health reports of last Fall, giving a record of a large number of cases of typhoid fever and other water-borne diseases with their attending deaths, must be expected. The suffering and loss of life, however, is upon the heads of the water works trustees, and if they are not compelled to answer to the people now, they will be compelled to answer to a greater power later on. A. E. B.

NEWS NOTES AND COMMENTS

A FAT BILL.—Dr. Walter C. Browning, of Philadelphia, it is said, has rendered a bill against the estate of Senator "Chris" Magee of \$190,000, for professional services. The bill covers twenty-one months, and the charge is at the rate of \$80 per hour for visits and actual attendance. One item is \$17,000 for last summer's treatment at Atlantic City.—*Times*.

DEATH OF WILLIAM H. GOBRECHT, M. D.—Word has reached us of the death of Dr. William H. Gobrecht, at Washington, July 19th. Dr. Gobrecht was seventy-two years of age and had practiced ever since his graduation from the University of Pennsylvania in 1849. During the civil war he was surgeon of the 49th Pennsyl-

vania Infantry and served on General Hancock's staff. For a number of years he was demonstrator of anatomy in the universities of Pennsylvania and Ohio, and previous to his removal to Washington as an examiner in the bureau of pensions, was a practicing physician of Fort Wayne, Indiana, where he was well and favorably known.

TO AVOID MALPRACTICE SUITS AT ANDERSON.—The physicians and surgeons, at Anderson, Indiana, owing to numerous suits for alleged malpractice, have agreed to refuse all services in surgical cases unless the patient or his family signs an agreement releasing the physician or surgeon from liability in the event of any unsatisfactory results.—*Jour. Am. Med. Asso.*

THE W. B. FLETCHER SANATORIUM.—In the advertising pages of this number will be found the announcement of the W. B. Fletcher Sanatorium, which has been incorporated at Indianapolis with a capital stock of \$50,000 by Drs. William B. Fletcher, Mary A. Spink, Urbana Spink and others. The sanatorium has been greatly enlarged and improved, and is entirely under the control of Dr. W. B. Fletcher, the well-known and thoroughly competent specialist in nervous and mental diseases.

ANNOUNCEMENT OF THE FORT WAYNE COLLEGE OF MEDICINE.—The twenty-third annual announcement of the Fort Wayne College of Medicine has been issued. Entrance examinations will be held on Tuesday, September 10, at the college building, and on the following day lectures will begin at 9 a. m. The session will continue with the usual holidays, until Tuesday, March 25th, when the commencement exercises are held. The faculty numbers thirty professors and instructors, and the general outline of the course indicates that the aim of the College is to produce not only well educated but intensely practical physicians.

THE SENN CLINICAL BUILDING.—The corner stone of Senn Hall, the new clinic building of Rush Medical College, was laid on June 19, 1901. The building, when completed, will cost \$120,000, of which \$50,000 was donated by Dr. Nicholas Senn, \$30,000 by six

other members of the Rush Medical College faculty, and the balance by the Trustees of the University of Chicago. The building will be of fire-proof construction throughout, will cover a ground area of 40x90 feet, and will have six floors and a well lighted basement. The basement and the first three floors will be devoted to the outpatient clinic, different rooms having been arranged to meet the requirements of different departments. The three upper stories will be occupied with clinical laboratories and amphitheatre. The equipment of the building has been carefully planned to provide for absolute cleanliness, both medical and surgical, and to meet fully the modern methods of clinical instruction.

CHRISTIAN SCIENCE FOR MONEY.—Graduates of this new school are instructed as follows: "When you begin to practice you may, perhaps, have some scruples about accepting payment for your work. I want to impress upon you that you must banish all such silly ideas from your minds at once. You must not only make people pay you, but you must make them pay you well. Remember all the doctor's bills that you are going to save them, think of the enormous amount of money that these poor mortals pay out every year for drugs that cannot possibly do them any good. If it is right to pay a doctor for having no effect upon you whatever, surely it must be right to pay for positive help and relief."

Here is the true doctrine at last. Matter does not exist. There is nothing but mind. Disease is evil thought. But you must not only make people pay you, you must make them pay you well. It is our familiar friend, the fakir, milking the gentle cow Credulity. —*Exchange.—Regular Medical Visitor.*

INCREASING STERILITY OF AMERICAN WOMEN.—This interesting subject was handled by Dr. George J. Englemann, of Boston, in a paper presented before the Gynecological and Obstetrical section of the American Medical Association, at the St. Paul meeting. A striking feature of the paper was the statement that today we are the least fruitful people in the world, and the statement is backed up by figures that will admit of no controversy. Statistics show that there are today barely two children born to a family among those who claim to be native white Americans. During the colonial period, one hundred years ago, there were six children per mar-

riage, while to-day the general European fecundity is 4.5 per marriage, and the French Canadians show the enviable record of 9.1 per marriage. It was thought highly essential that the American people should give this matter of fecundity and sterility careful attention, and still more that the American physicians, as the medical guardians of the Nation's welfare, advocate such measures as will tend to suppress vice and encourage the propagation of the race.

WOMEN IN RUSH COLLEGE.—At the date of its organization the University of Chicago set the stamp of its approval upon the coeducation of the sexes in its several departments; and ten years of unprecedented success have demonstrated the correctness of this course. If men and women can work together when busied with the problems connected with the study of literature, history, general science, and art, why can they not do the same in the department of medicine.

By the recent action of the trustees and faculty of the College, women are admitted to the medical courses of the first two years. No one can doubt that the last two years of the course, the Junior and the Senior, will offer the same privilege in proper time as a fitting conclusion of the step already taken. The coeducation of the sexes in medicine has been successful elsewhere. We shall look to see it no less a success in Rush Medical College.—*University Record*.

THE PRACTICE OF MEDICINE AS A SOURCE OF INCOME.—Physicians have always been careless and negligent about collecting their accounts, and as a natural consequence they accumulate very little wealth. D. A. R. Steele, in the *Medical Age*, gives some good advice when he says:

Always have a straightforward and accurate understanding with your patients as to the value you place upon your services. Never tell a patient, when he offers to pay a bill, "Oh! never mind, to-morrow will do just as well." Now is the accepted time; to-morrow may never come. Gratitude is short-lived. Our charges for professional services should be somewhat proportionate to the ability of the patient to pay, and to the responsibility involved in the services rendered in a given case. Keep a neat legible set of books; keep your accounts posted up each week; present your bills

monthly, and if they are not paid promptly, give them to an honest collector. Keep everything up in a business-like way, and your patrons will esteem you more highly. By being business-like in your dealings with patients, you will make your profession honored; you will make the practice of medicine a source of income; and you will derive the satisfaction, not only of the scientific pursuit of knowledge in the practice of our art, the keen enjoyment of original research, but the added satisfaction of deriving a living income from your efforts.—*Charlotte Medical Journal*.

THE UNSENTIMENTAL NURSE.—The trained nurse is a much belauded personage, especially in her graduating addresses, but she also comes in for her share of criticism. Dr. Malcolm Morris and others find her often conceited and too unconscious of the due subordination she owes to the medical profession, of which she is a sort of useful parasite. Others have criticized also, but in a recent issue of a lay journal we find even her merits, from a physician's point of view, are taken exception to by those who endure her ministrations. It objects to her noiseless efficiency, her conscientious regularity, her simulated amiability, her mechanical perfection in the performance of duties; her emotional impassibility, it says, spoils all the pleasures of illness; the patient can make no appeal to her sympathy and she only aggravates his irritability. What the average inexperienced male "who wants to enjoy the pleasures of illness," desires, the newspaper says, "is a ministering angel with actual sympathies whose feelings will be touched by human suffering, whose gentle hand will smooth the pillow and cool the fevered brow, and all that sort of sentimental thing, not a self-contained and unimpressionable female, as methodic as a machine and "as dead to his personality as a wooden Indian."

Personally, we do not know what the pleasure of illness is, something, we suppose like the dying of a rose in aromatic pain, etc., but we can appreciate the nurse's position when in unavoidable attendance upon a patient of that type, so far as our fancy can produce him. It may be that some nurses are wooden in their ways and obtrusive in their lack of sympathy. If so, it is an error, but one that is on the whole less liable to do mischief than the opposite extreme. To be a philanthropist, as Dr. Sevier says, one must be cold-hearted, and most certainly an inflammable-hearted female

philanthropist in a hospital, or even in a sick room, is a dangerous thing. When a nurse can, with all her other requirements met, steer clear of the Scylla of emotionalism on the one hand and the Charybdis of indifference on the other, she is a wonderful creature, common as she may be, and then if she is still criticised one ought to love her for the enemies she has made.—*Jour. Amer. Med. Asso.*

GERSUNY'S SUBCUTANEOUS PARAFFIN PROTHESES.—In thirty cases treated by subcutaneous injections of paraffin by Gersuny, the results have been invariably satisfactory. Two years have elapsed since the first experiments, and the result now is the same as at first, demonstrating that the prothesis can be considered permanent. The paraffin evidently becomes encapsulated in time and persists indefinitely without change. Among the cases that were treated satisfactorily by injections were the following: A prothesis of the testes, after bilateral castration; a woman for incontinence of the urine, due to total loss of the sphincter of the urethra; two patients for defective speech, due to an opening in the palate, or roof of the mouth; three patients to close a cicatricial defect in the sphincter; two patients for the relief of hernia after the refusal of operation; two cases to remedy the sunken or "saddle-nose" of syphilis, due to destruction of the septum; one case to restore the breasts in a young girl operated upon for re-section of several ribs; and several other cases of similar character and importance. The cosmetic effects have been most satisfactory in every case, there have been no inconveniences of any kind and the results persist indefinitely the same as at first.

The technique which Gersuny follows and which he claims is the only safe method, as determined by his experiences in the clinic and by experimental research conducted under his direction, is as follows: The paraffin or unguentum paraffini must have a melting point between 36 and 40 C. This is a soft salve at the temperature of the room, and is nearly fluid at that of the body. This soft, yielding body does not irritate the tissues but usually heals in place without reaction and can be palpated as a doughy mass at first, gradually growing harder, until after two months it feels cartilaginous from the proliferation through it and the encapsulation by connective tissue. Intense edema appears after injections in the scrotum or eye lids. In one case some of the vaseline had to be removed on this account. The vaseline is heated to boiling and

then cooled by standing the dish in cold water. The syringe is filled while it is still warm and fluid, but it is not injected until it has cooled to the temperature of the room, when it emerges like a worm from the point of the fine needle. Ebolism from vaseline of this consistency seems to be impossible, as there is no absorption as of a fluid. In loose tissue the vaselin must be protected from pressure and muscular movements to keep it at the desired point. In compact tissue a place must be made for it by a previous infiltration anaesthesia, and only a small amount should be injected at a time. In injecting paraffin to correct a deformity in the nose, Gersuny inserts the needle from the bridge of the nose down to the tip and injects the paraffin as he gradually withdraws it. When the entire framework of the nose is destroyed, the paraffin must be injected also under the alae nasi. In injecting cicatricial tissue, if the needle is inserted too close to the surface, a visible reaction follows and the parts become red for three or four weeks. The exact melting-point is determined by coating the bulb of a thermometer in water gradually heated. After it melts and floats on the surface of the water the temperature of the cooling water should be noted when the transparent drops become opaque once more.—*Abs. Jour. Am. Med. Asso.*

COURT DECISIONS AGAINST CHRISTIAN SCIENTISTS.—A New York judge, in passing decision upon a case in which a child died through lack of proper medical attention, and while under the care of christian scientists, said that the Constitution guarantees the adult fool the protection of the law as long as his folly does not encroach upon the life, liberty and pursuit of happiness of his fellow citizen, dissimilarly affected, but the relations of the child, unfortunate enough to possess fool parents, is far different in the eyes of the law: Where the parent is unable, either from mental incapacity or poverty, to properly provide for the child, the State assumes its care because it is clearly for the best good of the community, as a whole: Shiftless or ignorant parents may care little for the education of their children, nevertheless the law rightly intervenes in spite of the wishes of such parents and appoints truant officers to see that these children regularly attend school, and the common sense of the community assents to this usurpation of parental authority because it is for the best interest of the community that these children should not grow up into ignorant, lawless hoodlums. The State acts sim-

liarly in regard to the sale of cigarettes or liquor to minors, whatever may be the views of parents upon such subjects. Men with sane brains approve of such restrictive laws because it is admitted by those competent to judge that the use of these drugs is injurious to the growing child, and if the parent is careless the State must not be, since eventually dope-fiends and drunkards must be cared for at the expense of the State. The law does not admit the right of the parent to kill or injure a child even at the supposed request of the Almighty. This has over and over again been tested in the English courts by the Peculiar People and the Plymouth Brethren, with invariable fines and decisions against them where neglect to furnish medical services to their children has been proven. The prisoner violated the law because he wanted to. "It might as reasonably be applied to murder or any other crime. The child died from neglect and the law requires that a man shall care for those dependant upon him. I cannot suspend sentence. You are to pay a fine of \$500 and in failing to pay it you stand committed to the county jail at \$1.00 a day until it is paid. You can pay it or be a martyr to your faith if you wish to."

Along this line may be mentioned the action of a Chicago judge, who recently took the custody of a severely burned child from its christian science father and sent it to a hospital, where it has since made a satisfactory recovery, while its mother died in terrible agony from similar burns, untreated.—*Abstract Chicago Clinic.*

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

HOME TREATMENT OF PULMONARY TUBERCULOSIS.—R. H. Babcock, (*N. Y. Medical Journal*) gives the following points in the home treatment of pulmonary tuberculosis: (1) The most successful treatment of the disease is hygienic and not medicinal. (2) This includes (a) the building up of tissue resistance by superalimentation; (b) a continuous, or as nearly continuous as possible, sojourn in the open air under conditions that are determined by the patient's temperature; (c) hydrotherapy; (d) the careful and methodical regulation of the patient's daily life. (3) Although these requirements can be best secured in a sanatorium, they can be obtained at the patient's home regardless of climatic conditions there prevailing.—*Phil. Medical Journal*.

THE EMPLOYMENT OF HEROIN IN THE TREATMENT OF PAIN. This comparatively new derivative of morphine, which has been used so largely for the control of cough, has also been employed to a certain extent for the relief of pain; and it is claimed by Artaud in *Lyon Medical* of March 10, 1901, that its use in many cases renders the same service as does morphine, its influence often lasting for as long a period of time, and possessing the advantage that it does not disturb the digestive tract. In one instance in which the patient was suffering from severe acute left sciatica, he found that its hypodermic use resulted in the rapid diminution of pain after the first injection; after the second it was still more diminished; and after the third it entirely disappeared. The doses which he gave amounted

to about twenty minims of a one per cent. solution of heroin hydrochloride, and the first evidences of its good effects were produced within five or six minutes after the injection was given.—*Therap. Gazette.*

PUBLIC HEALTH THE PLAYTHING OF POLITICS.—The average American city needs nothing so much as a well administered department of public health. The merit system would bear fruit in no other department of the public service so promptly. But the dear people do not seem to have a fair conception of the necessities of the case, and are just as well satisfied with mediocrity or sheer imbecility in sanitary affairs as they are with sanitary efficiency and integrity. The results of good sanitation are decried by a general agreement that certain years were healthy ones anyway; the inevitable results of sanitary inefficiency are excused by the statement that the whole year has been unhealthy, or that the weather is unseasonable. The slipshod officer gets along without making any enemies by efforts to enforce the laws, and is therefore decided to be a good fellow; the conscientious officer makes lawbreakers come to time, spend their money and improve the sanitary conditions, he is therefore a crank, an extremist, or worse. . The political health officer only begins to realize the scope of his duties about the time his term of office ends; then when he might be of a little service the whirligig of fortune turns him out, and his successor assumes his duties and tries his apprentice hand upon a long suffering people. If this common condition in American cities **is ever to be remedied** the organized medical profession must take up the matter earnestly, and endeavor to secure the passage of laws, state or municipal, as the case may be, putting the public health service absolutely upon a merit basis.—*Amer. Med.*

FARADIZATION OF THE HEAD IN THE TREATMENT OF CHRONIC INSOMNIA AND ASSOCIATED NEUROSES.—Samuel Sloan, *British Medical Journal*, discusses faradization of the head in the treatment of chronic insomnia and associated neuroses. In forty-six cases of disordered cerebral function the neurosis associated with the insomnia was the common type of nervousness, with headache, lightness of the head, bad dreams, night startings, a feeling of confusion when adding up figures, a feeling of thickness in the head, creepy feelings in the head, etc., while in nearly every one of the cases the

primary complaint was loss of sleep or imperfect and unrefreshing sleep. He has observed cure in 45.5 per cent. of cases; marked improvement in 32.5 per cent.; some improvement in 11 per cent.; no appreciable result in 9 per cent.; cases which seemed temporarily worse, 2 per cent. He believes that the real influence of the treatment arises from the restful action induced in each molecule of the brain substance by the gentle rhythmic impulses of the current, reckoning these at over 100,000 during each sitting, and resembling the cerebation following change of scene and of occupation. Essential to this treatment is an instrument for measuring the amount of current employed. For this purpose he has been using the newest form of his faradimeter. The maximum amount of current given is one milliamperere. The dose at the first sitting should not exceed one-third of a milliamperere. Not only must the secondary current be controlled by a powerful rheostat, but the battery current to the primary should also have a rheostat controlling it, say of 50 ohms. The electrodes are soft and are applied to the brow and nape of the neck. The vibrations of the rheotome should be the fastest attainable. The current should be applied for fifteen minutes each time; three times a week for two weeks or twice a week for three weeks. Six applications in ordinary cases generally prove sufficient.—(*Phil. Medical Journal.*)

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

TELEPHONIC SOUND.—A sound or pair of pincers with telephonic connections is a new device for locating foreign bodies. The use of an assistant is required who announces when the instrument has come in contact with the foreign body. Bone tendon, etc., produce no sound as nothing but metal closes the circuit.

SUCCESSFUL SECONDARY NERVE SUTURE.—W. W. Keen reports (*Phil. Med. Jour. June 1, 1901*) two cases of secondary nerve suture followed by almost complete restoration of function. One

was of the posterior interosseous and one of the median and ulnar nerves. The first was done three months after the injury and the second six months.

EXTENDING AN OPERATION WITHOUT CONSENT.—Judge Kavanaugh, of Chicago, recently ruled that where a surgeon is performing an operation on a patient under the influence of an anaesthetic, and finds that another operation not contemplated before is required he has the legal right to perform the second operation without the consent of the patient. The ruling was made in a case brought by Mrs. Agnes Mulhem against Dr. Franklin H. Martin, of Chicago.

GASTRIC ULCER; OPERATION; RECOVERY.—H. Wynter Shuttle reports (*British Med. Jour.*) a case of perforated gastric ulcer operated twenty-eight hours after perforation which recovered. The pain was general and extended to the back. Abdomen was rigid and tender. Liver dullness was present and distention moderate. The perforation was in the anterior wall near the lesser curvature, just below esophageal opening. The peritoneum was cleaned with dry sponges.

CHLORETONE AS A LOCAL ANAESTHETIC.—E. R. Rasley, of Vanderbilt, Pa., says (*Intenat. Journal of Surg.*, April, 1901) he has used chloretone as a local anaesthetic in numerous cases with perfect satisfaction and regards it as absolutely safe. He reports a case of fistula in a man seventy-four years old with fatty degeneration of the heart, upon whom he operated with chloretone anaesthesia. "Syringeful after syringeful of the saturated aqueous solution was used in the line of the proposed incision" with complete success as to anaesthesia and not an alarming symptom.

WOUND INFECTION FROM PERSPIRATION OF SURGEON'S HANDS.—Genevit, in the *Gaz. hebdom de Med. et de Chirurgie*, March 3, 1901, (*Med. Review of Reviews*) reports the results of experiments made along these lines. He thinks perspiration the cause of infection in most aseptic surgical wounds. Infection from perspiration of the patient may be prevented by protecting the margins of the cutaneous wound by gauze so that the cutaneous secretion will be

absorbed and thus prevented from contaminating the wound. The surgeon's hands should be protected by rubber gloves except in cases requiring great nicety of touch, in which cases the immersion of the operator's hands for ten minutes in a two per cent. solution of tannin is advised after they have been sterilized.

TOTAL EXTIRPATION OF FEMALE URINARY BLADDER FOR MALIGNANT DISEASE.—Matthew D. Mann, of Buffalo, writes upon this subject in *American Medicine* of July 13th and regards the operation as feasible in certain cases. Mann has done the operation twice. Both cases recovered from the operation, but one died later, with pyelonephritis without any return of the cancer and the other was at the time the article was written suffering from a recurrence with symptoms of sepsis. The kidney infection in the first case was probably not due to infection through the ureter as pus was found in the urine prior to the operation and never disappeared. The ureters, together with a small part of the base of the bladder and underlying vaginal wall, are dropped into the vagina and the peritoneum closed. No stitches are necessary to hold the ureters in the vagina. The vaginal orifice may be closed to make a receptacle for the urine which will be discharged voluntarily through the urethra which is left. In Pawlik's case the woman had perfect control of her urine. The uterus must be removed if the vagina is to be used as a receptacle for the urine else the new bladder is likely to be infected by menstrual and other uterine discharges.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

THE USE OF ADRENALIN SOLUTIONS.—The following is taken from the July *Ophthalmic Record*:

“A regular meeting of the Chicago Ophthalmological and

Otolaryngological Society was held April 9th, 1901, with the President, Dr. Casey A. Wood, in the chair.

"Dr. Albert E. Bulson, Jr., of Fort Wayne, Ind., presented a preliminary report upon the *Use of Adrenalin Solutions*. He said that several weeks ago he had, like many other members of the Society, received samples of Adrenalin solutions from a well-known pharmaceutical house, for experimental use. The Adrenalin used in the preparation of the solutions was said to be the pure active principle of the suprarenal gland. The solutions furnished for trial were in strengths of 1-10,000, 1-15,000 and 1-1,000, with .5 per cent. chloretone added as a preservative, and reported by the manufacturers as being sterile, unirritating, of uniform strength and fairly permanent.

"These solution were first tried in the nose, and it was at once discovered that a very decided blanching of the mucous membrane occurred after use of even the weakest solution. It was soon noted, however, that for general purposes the strongest solution (1-1,000) was none too active, particularly if the solution was used with a view to performing bloodless operations of a minor character. This was also found true in using the solution in the eye. A 1-1,000 solution blanched the eye in a very few seconds, and this effect lasted from thirty minutes to two hours. This effect was also secured in an eye affected with superficial inflammation, such as catarrhal conjunctivitis, and to a less extent in the deeper inflammations of the eye, such as iridocyclitis.

"Dr. Bulson said that under the influence of a 1-1,000 solution and cocain anaesthesia he had performed tenotomies, advancements, and other operations upon the eye and its appendages, with but little, if any, loss of blood. In operations upon the conjunctival surfaces of the lids and the eye muscles, he finds that there is practically no hemorrhage if the strongest Adrenalin solution has been previously used, and in this respect the results compare equally with the results obtained from the freshly prepared solution of the desiccated gland. He finds that in intra-nasal operations the solutions work beautifully. In the removal of polypi the surrounding intumescent tissue are completely reduced, thus giving room for work and a clear view of the growth, as well as limiting, if not entirely preventing, hemorrhage. Nasal spurs,, unless very large, are removed without hemorrhage of any consequence.

"He has lately used the solutions in the treatment of middle-

ear inflammations, but with rather indifferent success. In one case of mild acute catarrhal inflammation of the middle-ear, accompanied by tinnitus, moderate impairment of hearing and pain, relief was obtained within a few minutes by applying the strongest Adrenalin solution to the post-nasal mucous membrane and the tympanum. In a case of pannus and acute exacerbation of a trachomatous inflammation, the strongest solution has been used with apparently beneficial results. The reduction of the congestion is maintained by instillations of Adrenalin solutions every four or five hours, and this is supplemented by the other usual treatment prescribed in these cases. He believed that in acute congestive conditions of the ocular and palpebral conjunctiva it would be possible to effect a cure by repeated intillations of Adrenalin solutions three or four hours apart.

"Dr. Bulson said that the solutions have a tendency to deteriorate if exposed to light or air for any length of time, but that if ordinary care was observed the solutions would remain permanent and effective for a considerable length of time, and certainly for a sufficient length of time for the average operator to use the original package in which the solution comes. If there is any doubt as to the solutions being sterile, he would advise boiling them, as such treatment does not impair their efficacy.

"Owing to the fact that the solutions are ready for use at all times, he thought they were very much better than the ordinary suprarenal gland solutions, and therefore a valuable accessory to the ophthalmologist's equipment.

"In discussing the paper, Dr. Gradle said that he had used adrenalin chloride. He found the solutions to change in character in the course of time, darkening and losing in strength. He studied its effect on congested ocular surfaces, as well as its influence on the turgescence of the nasal mucosa, and in the control of hemorrhage in a small number of eye operations and a large number of nasal operations. He has not been able to satisfy himself that the one to ten thousand solutions have any appreciable effect; one to five thousand has a distinct effect; one to one thousand is efficient, but not at all equal to a freshly prepared ten per cent. solution of the powder. He applied the one to ten thousand solution in a case of cyclitis, intense iritis, etc., and there was no appreciable effect on the circulation, whereas a ten per cent. solution of the freshly prepared powder, which was applied subsequently, blanched the

tissues immediately. He believes the strength of the adrenalin solution to be decidedly inferior to the ten per cent. solution of the powder.

"He has found that the addition of chloroform to the solution of the powder will preserve it. The addition of one per cent. of chloroform will make the solution absolutely stable as far as putrefaction is concerned. It loses its color, however, and eventually deteriorates in strength. The difference between a solution one day old and another three or four days old is not appreciable; but the difference between a two-day-old solution and one two weeks old is very decided. He said that in cases of enlarged turbinal the operation can be performed with perfect ease and without any hemorrhage whatever if fresh solutions are used. Old solutions are always accompanied by some hemorrhage.

"The addition of one per cent. chloroform is not objectionable when the solutions are used in the nose. For the eye it is objectionable, but it can be easily driven off by heat. Dr. Gradle dips the swab into the solution and then holds it over a lamp until the chloroform is driven off. He says that of all the preservatives he has tried none has given him so much satisfaction as has chloroform. In Darier's clinic the suprarenal solution is used without the addition of any preservative. It is sterilized and then drawn up in capillary tubes, which are sealed. It does not spoil, but it deteriorates just the same.

"Dr. Starkey, in discussing the paper, said that he had used the adrenalin solution in various eye cases and has been very much pleased with it. His experience in nose and throat cases has been so limited as not to warrant an opinion. He found the one to ten thousand solution is practically useless. In mild cases it produces blanching very quickly, but the effect also passes away quickly. He has frequently used the one to five thousand solution on cases a number of times, and says he has never yet found it to produce any unpleasant effect; in fact, in most cases, it has seemed to be decidedly efficacious. In subacute and chronic cases the effect produced lasts about four hours, and we have no such after-effect as is produced by cocaine. In many cases the congestion at the end of twelve hours will not be as great as it was before the solution was used. Dr. Starkey has found that adrenalin very decidedly modifies the course of cases of episcleritis. Within the last two or three weeks he has had under his care six or eight cases of this kind, and

found that a few drops of the one to five thousand solution produced in moderate cases a complete disappearance of all the blood-vessels, and they were very slow in returning to their former size. He has used the extract of suprarenal gland for several years, but mainly only in operations, because of the difficulty of keeping the solution. He has kept the solution for weeks without much deterioration, but it has proven irritating, sometimes causing severe smarting. The adrenalin solutions certainly keep better than the solutions of the powder. The solutions which he has had in his office for two months have not changed color as yet.

"Dr. Bulson, in closing the discussion, said that the change of color of the solutions was due to exposure to light and air. He has had one or two bottles of the solution in his desk for some weeks, tightly corked and away from the light, and they have not changed in color. He has noticed that there seems to be some difference in the effects produced by fresh solutions, recently received from the factory, as compared with the effects produced by solutions received eight or nine weeks ago. He attributes this to the fact that the solutions which he had been using were being exposed to light and air through frequent opening of the bottle. Solutions kept in the dark and well corked remain perfectly fresh and efficacious for several weeks at least. He thought it advisable to have a stock bottle from which a small portion may be taken each day for regular use. There can be no objections to boiling the solutions if there is any doubt as to their being aseptic.

"Like Dr. Gradle and Dr. Starkey, he discarded the use of the 1-10,000 solutions, as they are too mild. The 1-5,000 solution blanches the conjunctival surfaces and the mucous membrane of the nose very nicely, but the 1-1,000 solution does the work much more satisfactorily.

"In reply to Dr. Gradle's point that the solutions do not effect the deeper congestions, nor entirely prevent hemorrhage in intra-nasal surgery, he would say that such has not been his experience. He said that about a week ago he enucleated a perforated eye in which there was marked iridocyclitis. The application of a 1-1,000 adrenalin solution blanched the eye perfectly and simplified the operation considerably through prevention of hemorrhage. His operations upon septal spurs had been as bloodless with adrenalin solutions as with the ordinary suprarenal gland solutions, but if a

more vaso-constricting effect is desired it can be obtained by an increase in the strength of the solution."

"As to suprarenal solutions containing chloroform as a preservative, he thought he would have some hesitancy in using them on the conjunctival surfaces, unless some method was used to destroy the chloroform immediately before use. When used on a pledget of cotton, as a swab, the chloroform might be destroyed by holding the swab in the gas flame for a few seconds prior to use, as suggested by Dr. Gradle.

"As Adrenalin is non-irritating, non-toxic, and a very powerful heart stimulant, there seems to be no good reason why it cannot be used in a 1-500 solution, or even stronger. Further experience will probably indicate the use of a 1-500 solution as the standard for operative work."

BOOK REVIEWS.

DIAGNOSIS AND TREATMENT OF THE EYE, by Edward Jackson, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic; formerly Chairman of Section on Ophthalmology of the American Medical Association; Member of the American Ophthalmological Association; Fellow and Ex-President of the American Academy of Medicine. With 178 Illustrations and two Colored Plates; 604 pages; Cloth \$2.50; Philadelphia, W. B. Saunders, 925 Walnut street. 1900.

With such a large number of works upon the eye, of recent publication, it would seem that the publication of this book would scarcely be warranted, yet any one who examines it carefully must come to the conclusion that it fills a place not filled by any other treatise upon ophthalmology. Above everything else the work is extremely complete, while yet concise, the whole being contained in 600 pages, in convenient form and moderate price. Many commendable features might be mentioned. and those that struck us as particularly worthy of note are the following: The chapter covering the subject of the examination of the patient is an important one, and not usually given sufficient attention. The various tests of acuteness of vision and the inferences that may be drawn from various forms of impairment of vision are well described, together with the subjective phenomena which form such a large part of the description given by the patient. The author properly calls attention to the absolute necessity of keeping complete though condensed records of all examinations for further reference.

An important chapter is the one upon skiascopy, a subject that owes much of its importance today to the writings and teachings of Dr. Jackson. This chapter is so carefully written, that even the beginner can understand the principles which underlie this well-established method of determining errors of refraction.

The chapter upon squint gives the ideas which are at present accepted by the leading ophthalmologists. The author condemns the frequent and often unnecessary tenotomies so commonly adopted

in the treatment of squint, and believes that a careful correction of errors of refraction and the constant wearing of correcting lenses will cure all cases of squint, due to hyperopia, if the treatment is adopted at the early stage. In the operative treatment of squint, the author advocates tenotomy only in well selected cases, and even then in the majority of cases prefers advancement of the weakened muscle.

The chapters on operations, in the back part of the book, are exceedingly well written and give a very comprehensive understanding of all the important operations from the preliminary steps to the completion of operative treatment.

Every page is concluded with a bibliography referring to the latest publications upon the subjects treated in the chapter. This bibliography will undoubtedly stimulate further reading.

As a book for the student or general practitioner we believe the work of Dr. Jackson is unsurpassed.

A. E. B.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS.—A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College, etc. Volume I, Electrotherapy, by George W. Jacoby, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children, etc. In two books: Book II, Diagnosis; Therapeutics. Illustrated. Published by P. Blakiston's Sons & Co., 1012 Walnut street, Philadelphia, Pa. Price, eleven volumes, \$22.00 net.

This volume which is the first of a series of eleven volumes to be devoted entirely to the discussion of therapeutics without drugs is one of the most significant phenomena of the new era which has already dawned upon us. It has been too true in former years that to speak of the treatment of disease was simply to raise a question as to what sort of medication was best adapted to the purpose. Gradually a new era has been developing and the forces of nature such as electricity, air, water, etc., together with the scientific study of dietetics, have been assuming their proper place among the role

of therapeutic agents and bid fair to soon play a prominent role if they do not do so already.

This volume as well as the one which succeeds it deals with the important subject of electrotherapy and is written by one who is well recognized in this department of medicine. The volume is taken up entirely with electro physics and a discussion of the apparatus required for the therapeutic and diagnostic use of electricity. A thorough knowledge of electro physics is certainly essential to the intelligent application of electrotherapeutics and the clear discussion of the subject within a compass of 116 pages leaves nothing to be desired along these lines. The discussion of apparatus is especially full and includes a description of the apparatus and technique of X-ray work so essential at the present time to anyone having much to do with this line of work. The book is elegantly gotten up from a mechanical point of view and is most highly commended to all those who wish to fully understand the vast scope and wide application not only of electrotherapy but of the other agents included under the term physiologic therapeutics which are considered in the succeeding volumes.

G. W. M.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

INFLAMMATION AND ITS TREATMENT.*

By D. J. LORING, M. D.
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What is inflammation? If I were to ask each physician present to define this word, I am confident that no two would agree in their answer, and that you would differ as much in the idea you would convey as in the language you would use. And yet I have no doubt that you all have definite conceptions, and understand what is called the inflammatory process, according to the view each individual physician will take of it.

The diversity of opinion which prevails regarding the nature and character of inflammatory processes is not due to the inability of the profession to learn, or that the problem is so difficult to understand, but is because they have been improperly taught. Too much stress has been placed on the four or five cardinal symptoms as constituting the disease, without considering the cause or causes, the condition of the tissues, or the result of such causes.

To the mind of the ordinary student who reads modern text books on pathology, surgery, or surgical pathology, the description and discussions of the process we call inflammation presents

*Read before the Kankakee Valley Medical Association.

a very confused and unsatisfactory picture, and instead of giving him something definite to grasp, something which gives him positive information, he finds himself surrounded with a great mass of facts true enough in themselves, but so inconsistently arranged or so illogically stated that they fail to teach him.

Then does it become a wonder that we find physicians who widely differ as to the nature and character of the inflammatory process? Would it be unusual to find one physician who believes that inflammation is always destructive in character, while another, equally competent to determine, who believes that it is always conservative, and hence always reparative, or at least an attempt to repair damages already done, or being done?

Ever since Galen described inflammation to be a pathological condition of an organ, or a part, characterized by dolor or pain calor or heat, tumor or swelling, and rubor or redness, to which more modern authors have added a fifth symptom, *functio laesa*, these symptoms have been so continually drilled into the mind of the student that he has come to believe that they constitute the disease, and forgets the more important fact that after all they, like fevers in general, are only symptoms, the result of definite causes.

Both Senn and Nancrede, in their most excellent works on the Principles of Surgery, have tried to clear up this confusion by limiting inflammation to mean the action of micro-organisms on living tissue, or their products, or both. They teach that the absence of micro organisms in an active state means the absence of inflammation. They deny that there is any such a thing as aseptic inflammation; that where a wound heals without pathogenic germs in an active state, or, what is called an aseptic wound, there is no inflammation. They call this normal tissue repair.

Stengle, in a recent work on Pathology, and equally able, defines inflammation as meaning the vascular, exudative, degenerative and regenerative changes occurring in living tissues, the result of irritation caused by mechanical, thermal and chemical agents, the irritation causing sometimes one and sometimes another primary lesion. In closing his remarks on the history of inflammation he says, "that at the present day it is generally understood as being purely reactive in character".

Sanderson, whose definition has carried much weight with the profession, defines inflammation as the succession of changes which occur in living tissues when it is injured, provided the injury is not

of such a degree as at once to destroy its structure and vitality.

J. Bland Sutton uses the term inflammation in a more restricted sense in coining the following definition: "It is the method by which an organism attempts to render inert noxious elements introduced from without, or arising from within". As nothing is said of the method, it must become apparent that this definition does not define.

According to Senn and Nancrede a sprained ankle, no difference, if not infected with pathogenic germs, how much the tissues may be damaged, or how great the swelling, pain, heat, or redness, together with the loss of function, this would not be inflammation. Or a fractured bone, if not infected with micro-organisms, notwithstanding it was characterized by all the clinical symptoms of inflammation, as well as the identical histological changes in the neighboring parts, as found in infected wounds, still this would not constitute inflammation, but only normal tissue repair.

If we could only get rid of this word "inflammation" and begin our studies all over again, I feel confident that we could get rid of this confusion and gain definite facts and positive information. But it has been so long in use and has proven so valuable to the profession, as by its employment we can name almost any disease, and it is so satisfactory to the laity to hear the physician say, "It is inflammation," that I do not see how we can rid ourselves of it. It seems to me that any one who will carefully read the histological changes which Senn and Nancrede describe as occurring in aseptic wounds, and read what they describe as occurring in infected or true inflammatory wounds, can hardly help but recognize that from a histological standpoint, at least, they are describing the same identical process, modified only by the nature of the damaging influence.

It would therefore appear that the definition given by Stengle, and maintained by those who believe that inflammation is truly reactive, and hence always reparative, or at least an effort to repair damages already done, or being done, is the most reasonable, as we are unable to separate the histological changes which take place in aseptic wounds and those occurring in the most intense inflammation, except a smodified by the nature and character of the traumatic influence.

To make what I mean a little more clear, I desire to briefly enumerate the histological changes which take place in the repair

of aseptic wounds, that they may be compared with what takes place in true inflammatory wounds, and will then ask you to tell me wherein they essentially differ. But first let me remind you, that if the changes about to be described did not occur no wound would ever heal, and every time an infection occurred, in the absence of these changes, it would necessarily prove fatal. Let me call your attention to another fact, that the process of repair, as well as the defense against the inroads of micro-organisms from without, are the same in all tissues, no difference whether hard or soft, vascular or avascular, in bone, muscle, tendon, nerve, cartilage, or any other anatomical structure found in the body.

For the purpose of illustration I will mention three kinds of wounds, and that they may be readily understood, I will locate them all on the forearm. First, an incised wound made under antiseptic precautions and supposed to be germ free. Second, a simple fracture of the forearm and with reasonable assurance that it is germ free. Third, a cellular abscess of streptococcus origin and which we know is not germ free.

Now let us watch all these wounds recover and note the changes in the tissues made necessary to bring about such a recovery, and then tell me wherein they essentially differ, except as modified by the character of the traumatism. This question must be answered before we will ever arrive at a satisfactory definition for inflammation. In the incised wound, as well as in the fractured bone, it is easily understood that they are both the result of direct mechanical force, and are essentially traumatic injuries. But in the streptococcus abscess it is not so easy to see that there is any traumatic influence at work, at all events, in the sense the word trauma is ordinarily used. But a little reflection will reveal the fact that the causes which have operated to produce the abscess were neither mechanical nor thermal, but are due to the peptonizing influence of a product of bacterial growth, a chemical substance capable of producing death of tissue, and hence after all is none the less traumatic than the knife that made the incised wound, or the blow that fractured the bone.

Now let us note the changes which take place necessary to bring about recovery. In the incised wound, as soon as hemostasis has taken place by the formation of thrombi in the injured vessels, the wound surface becomes covered with a layer of plastic lymph, which is derived from the plasma of the blood

and is made coagulable by the aid of a fibrin ferment derived from the third corpuscle or blood plaques. This layer of plastic lymph has nothing to do, *per se*, in the reparative process, but is present in all open wounds. It does serve a useful purpose in mechanically glueing the edges of the wound together, but more particularly in supplying nutriment, as well as scaffolding, for the histological elements which are to come later.

Whenever tissues are injured, as in the incised wound, a subcutaneous contusion, or the peptonizing influence of bacterial growth, there is always a primary acceleration of the circulation in the immediate vicinity of the injury. This is always of a very short duration and is followed by a marked slowing of the circulation. The red corpuscles are relegated to the center of the stream and the leukocytes are seen rolling lazily along the periphery of the axial current and adhering to the vessel wall. The blood vessels, especially the venules and capillaries, are dilated, the parts are reddened, and constitutes one of the Galenic symptoms. The leukocytes by virtue of the ameboid movement pass through the vessel wall between the endothelial plate—like lining and take their place in the connective tissue spaces, together with the liquor sanguinis, and gives rise to swelling, another symptom. This exudation and swelling through pressure and tension on nerve filaments gives rise to pain, or the third cardinal symptom. The increased cellular activity incident to these changes causes increased caloric, and hence we account for the fourth Galenic symptom.

Now, if the injury is not sufficient to produce death of tissue, the whole process may stop here, the red corpuscles are seen to oscillate, they leave the center of the blood stream, and freely mix with the leukocytes, which have ceased to adhere to the vessel wall, the current is again accelerated, the vessels diminish in caliber and regain their integrity, the capillary engorgment disappears, and the normal condition is restored. This part of the process is what is called hypermia or congestion. But if, on the other hand, death of tissue has resulted, as in the incised wound, as well as broken bones and cellular abscess, then complete stasis will take place, the dead tissues have to be removed and the defects repaired. This is brought about by the proliferation of connective tissue cells.

The connective tissue cells in the immediate vicinity of injury undergo rapid proliferation by indirect cell division or karyokinesis, which, after slight modification, are converted into atypical con-

nective tissue. These new connective tissue cells, from their resemblance to epithelial cells, have been called epithelioid cells, but they are embryonic connective elements or fibroblasts, and like leukocytes are possessed with ameboid movement. These cells in aseptic wounds are transformed into a atypical connective or scar tissue. In infected wounds they first serve the useful purpose of a barrier to the inroads of nucro-organisms and their products until these germs are destroyed and their products eliminated, when they proceed the same as in aseptic wounds, to repair the defects. If this proliferation of connective cells did not take place, no injury, no difference how free from germs, would ever heal, and every infection, no difference how mild the infecting agent, would ever recover, but would always result in death of the individual.

I do not wish to be understood to say that the process in septic and aseptic wounds clinically are the same, but, so far as the histological changes are concerned, they are the same, only modified by the nature and character of the traumatic influence, and I claim that pathogenic micro-organisms and their products are just as much traumatic tissue as any mechanical or thermal agent, and, in fact, more so.

The modifications noted in septic wounds differ from aseptic wounds only in degree and not in kind. First we note the same temporary acceleration of the circulation folowed by slowing of the same. The capillaries and venules are dilated, and the red corpuscles are found in the center of the blood stream, the leukocytes at the periphery, and adherent to the vessel wall and by virtue of their ameboid movement pass through the vessel wall and occupy connective tissue spaces. The liquor sanguinis, in obedience to mechanical laws, transude the vessel wall, undergo coagulation, and the inflammatory exudate is formed.

In the immediate vicinity of the focus of the abscess proliferation of connective tissue cells take place, forming a barrier against the inroads of micro-organisms until these products are destroyed, and then proceed to the formation of the conventional capillary loop, or granulation tissue, by which the injury is finally repaired. Up to this point the changes are identical with what takes place in the healing of aseptic wounds. But from this point the process is modified by the character of the labor to be performed, and here is where the battle royal begins. It is not alone that the defects of damages

already done have to be repaired, but the further ravages of micro-organisms have to be stopped, and after that the defects repaired.

I have already mentioned the fact that leukocytes, as well as the fibroblasts, or the embryonic connective tissue cells, possess ameboid movement, that is a property of changing their position, and by virtue of which they are able to serve as sentinels or guards against the further action of micro-organisms. They seem to be capable, in addition, to act as scavengers, by either eating up, as it were, or assimilating the micro-organism, or transporting them to some distant region where they may be eliminated and do no special harm.

This process has so often been compared to two armies on the field of battle, and with such force of illustration, that I can do no better than to retain the same.

"We find then at the seat of this abscess two armies have met, the tissues of the body as a garrisoned fort which has been attacked and entrance gained by micro-organisms from without. The description of the battle now about to be fought is the activity of the micro-organisms on the one hand and the tissues of the body on the other, the result of the contest depending on the inherent resisting ability of the tissues, or malignancy and activity of bacteria and their products. When the streptococcus gained admission through some slight abrasion of epithelium to the tissues, that is beneath the membrana propria, it found blood vessels and lymphatics a very favorable soil and environments for development. Their life history being short, retrograde changes soon began, and the result is a ptomain, which is destructive to cells. The tissues ever ready to respond to a call for defense, begins to throw out around the seat of invasion all the protective material possible, for the purpose of limiting the damages to the least possible extent, hence we have the changes above described, that is the inflammatory exudate, consisting of coagulated plasma, leukocytes, and proliferating connective tissue cells."

It was shown a long time ago that a certain number of leukocytes possessed a peculiar property known as phagacytosis, that is a power to wander out and by throwing themselves around micro-organisms eat them up, as it were, or assimilate them. This property is now known to extend to all leukocytes, as well as connective tissue cells, and is known as chemotaxis, which means the affinity one cell has for another cell, or the affinity an animal cell

has for a vegetable cell. That this phagocytic activity on the part of the leukocytes and connective tissue elements may be successful in combating the damaging influence of the invasion of micro-organisms from without, they must in most inflammations be reinforced by a larger number of leukocytes, as well as connective tissue cells. Hence we find in nearly all inflammatory processes of a grave character, if recovery is to take place, that in addition to the proliferation of the connective tissue cells, the leukocytes of the entire body are also largely increased.

This cellular activity on the part of the tissues of our body is a degree of intelligence on the part of Nature that physicians are usually unwilling to admit. But let me ask them to explain from whence comes that intelligence by which the omentum will with such promptness and energy, in three cases out of four, wrap itself around the perforated appendix, and bind, as it were, with far greater degree of security than any surgeon is capable of doing, and with almost superhuman skill and energy hold the invaded micro-organisms at bay, forcing them to retreat back into the intestines, their normal habitat. And not only this, I will ask them to explain the process by which, after succeeding in defeating the inroads of these micro-organisms, they proceed in a leisurely way to repair the damage done by carrying the dead microbes, as well as the dead cells, to distant parts of the body where they may be finally eliminated and do no further harm, and in after life we can see nothing to mark the field of battle except possibly an appendix shortened one half by a small amount of scar tissue.

This process is known as leukocytosis, and it seems now fairly well settled that if this leukocytosis, especially in all grave types of infection, does not take place the case is not likely to recover.

In this contest between the leukocytes and connective tissue on the one hand, and the micro-organisms on the other, goes on until one or the other is exhausted and ready to capitulate, and the results are favorable or unfavorable, according to which army proves the stronger.

It is not to be supposed, even in cases which recover, that no leukocytes or connective tissue cells will lose their lives any more than it is to be supposed that any great victory can be won without loss or the expenditure of energy. If the death of leukocytes or tissue cells are small, they are probably used up as food for those that are still living, or carried away to some part of the body, which,

after undergoing retrograde changes, are finally eliminated. But if, on the other hand, the loss through death is great, they cannot be assimilated and carried away to harmless localities, but are left on the field of battle as it were, and become aggregated in the center, or one or more centers, and we account for pus cavities which are simply an aggregation of dead leukocytes and connective tissue cells and other debris. The pus, as you all know, tends ultimately to evacuate itself. When the tissues, as already described, having defeated the micro-organisms the only thing now left to be done is to repair the defect, which is done in the same way, and by the same means as in aseptic wounds.

Now having described the histological changes which occur in septic, as well as in aseptic wounds, and having shown, as I believe, that so far as histological changes are concerned, save a slight difference due to additional labor to be performed in one case, and that this difference is one of degree, and not of kind, I ask you again, to tell me what shall we call Inflammation? Shall we follow Senn and Nancrede, and limit the word to mean the action of micro organization on tissue and say it is always destructive? Or shall we follow the other class and say that inflammation means the tissue changes, the result of injury, and is always reparative, or an attempt to repair?

I have tried to show in this discussion, first, that the whole question of the inflammatory process is simply one of damage done to the tissues, and that micro-organisms and their products are just as much traumatic to tissues as any mechanical or thermal agent. And, second, so far as the changes in the tissues are concerned, they are the same in infected as in aseptic wounds; that in infected wounds we must not consider the traumatism to have ceased until the micro-organisms have been destroyed, and their products eliminated, and that after which the injury is repaired the same as in aseptic wounds. And, third, in all infected wounds, it is a question of the activity of the micro-organisms on the one hand and the tissues on the other, and as to which force will succeed will depend on the degree mainly to what extent leukocytosis and connective tissue proliferation can take place, whether recovery will follow or not.

From what has been said it is apparent that the burden of damage in all inflammation falls principally on blood vessels, as it has been shown that slowing of the circulation and stasis is the

one thing that defeats the tissues in overcoming the invasion of micro-organisms, and it is easily understood that cells must be supplied with abundant nutrition to enable them to carry on their increased labor, and in planning any treatment this should be kept prominently in view. All I shall say as to treatment will be general in character, and may be applied to general systemic affections, such as essential fevers, as well as to ordinary inflammation.

Of course, the ideal treatment would be the application of some antiseptic to all infected injuries, either locally or through the general system, as would destroy the infecting germs without at the same time injuring the tissues. But unfortunately this cannot be done, as we find that such antiseptics as will destroy the germs will also destroy the tissues, and hence need not be considered here at all.

In the treatment of aseptic injuries all that is required is to protect the wound so as to preserve it in an aseptic state, and if there is the slightest amount of leukocytosis and proliferation of connective tissue cells, recovery is sure to take place.

As to the specific use of remedies, either local or general, I think they may be limited to the use of quinine in malarial disease, mercury and iodides in syphilis, salicylates in acute rheumatism, and antitoxine in diphtheria. It is to be hoped that time will largely increase this list, and in fact it seems that the prospects are now good that it will, but for the present we must content ourselves with what we know. But if inflammation is caused alone by germs, what is the use of considering the therapeutics of inflammation? Why not state merely what preventives can be used, and when these either fail or cannot be adopted, say that, of course, the physician is at the end of his resources, and must abandon any attempt to control or guide the inflammatory process. This is the question actually asked by some who should know better, and when not put in words, is the governing principle of others.

It seems to me that no one will deny that if we can control the circulation in the vicinity of an inflamed area, and prevent thrombosis and stasis, we will be able to supply the histological elements, of which I have spoken, with better nutrition, and in which event they would be able to carry on additional labor imposed on them. This I feel certain we can do in most cases. In many instances of infection the number of germs are so few at the outset that the tissues may gain the mastery, if fresh hordes

of microbes are prevented from arriving and being detained. If in addition those present can be removed the chances of victory for the tissue cells are still further improved. If all local conditions unfavorable to cell nutrition can be ameliorated or removed, everything which is demanded by theory or practice will have been effected, and most, if not all, of this can be done.

The measures best adapted to secure this end are those which act on the heart itself, as it is evident that if an inflamed locality has already as much blood, and possibly more than can pass the capillary channels, and this can be reduced and stasis and thrombosis be prevented, the condition becomes more favorable. The one agent always safe to use, and of far greater value than is generally supposed, is rest in bed, and the absolute interdiction of all muscular activity.

Guy has shown that on an average there are fifteen beats more per minute in the upright posture, as compared with the recumbent one, and that this is due to the muscular action necessary to maintain the upright position.

Nitrogenous food is the most permanent of all heart stimulants, maintaining the heart's action far better than any drug. The withdrawal of this class of foods will cause a marked reduction in the heart's action and a corresponding improvement in the character of the inflammatory process.

I would not advise the use of those drugs which depress the heart's action, either by reducing the frequency or force of the heart's action, for while they accomplish this result in a marked degree, they also depress the general vitality of the cells, and hence what they accomplish in one way they more than lose in another. Another thing to be feared, and worse, too, than an over heart's action, is the direct reverse, a weak heart. This may have the same unfavorable action on inflammation as a strong heart, and be the cause of stasis and thrombosis. This is to be overcome by the action of such remedies as will increase the force of the heart's action; strychnia and digitalis are the remedies usually employed, but I think they are entirely inferior to good nitrogenous food. Cold is a remedy of great value in some cases of inflammation, but is also a remedy that can do harm, and a word of caution is requisite here. Although cold, for instance, will tend to diminish the caliber of the enlarged vessels, especially in the periphery of an inflamed area, thus obviating the dangers of

slowed circulation, yet it exerts a depressing influence upon the vitality of the cells, and somewhat condenses the tissues. It thus lessens the size of the plasma channels and certainly diminishes the ameboid movement of the leukocytes, both inside and outside the circulation, hence favoring stasis and thrombosis of the vessel, and gorging of the tissues with cellular exudate at the focus of inflammation.

Judgment is, therefore, requisite to decide whether the evil at the focus will not outweigh the good at the periphery. Cold should be employed, when used at all, in only a moderate degree, and that should be continuous in its action.

Heat is a remedy of far more benefit than cold, the primary effects of which is to dilate the vessels, but its continuous action will contract the vessels. If great good may follow the application of heat, as by temporarily dilating the vessels in an inflamed area, we relieve the engorgement, and in this way allow the blood current to assert its action, and wash out toxic material and in this way improve the nutrition of the part, and very favorably effect an inflammatory process.

Posture of an inflamed member may act in a salutary way on an inflammation, first by acting on the arterial side of the inflammatory focus, as we all know that less blood will enter an inflamed area when the member is elevated than when dependent. But it also has a favorable action on the venous side of the inflammatory process, as when we bring gravity to our aid, it is easily understood that drainage is materially promoted.

Temperature in most inflammations is an important symptom, and will usually demand our attention. Temperature, when of a moderate degree, needs no special treatment. But it may be excessive and cause restlessness and aggravate the pain, in which event it should be reduced. I would not recommend the administration of those drugs which lessen temperature, more especially the coal tar products. I do not mean to say that they will not lessen temperature and ameliorate all the symptoms, for they do. But their effects on the blood and other tissue cells are damaging to the highest degree. They deglobinize the blood, depress the vitality of cells, lessen thermo-genesis, and materially lessen the ability of the emunctories in eliminating leukomains, ptomains and other poisonous material. Temperature can be reduced usually in sufficient degree by a cold sponging or cold pack or bath and it is gen-

erally safe, and is a means which we always have under our control.

It has been shown that in all infective inflammation we must provide for nutrition of the cells in their contest against microbes; that we must provide to eliminate the ptomains, the result of microbic activity; that we must provide for the elimination of leukomain, the result of death of tissues, as well as general metabolism of the entire body, and as these substances are eliminated through the excretory channels of the body, these should be kept in the most active possible state. I know of no remedy, especially in the beginning of an inflammation, that will accomplish so much good in this way as the free use of hydrogogue cathartics. The free use of these remedies enables us to dehydrate the blood, and thereby drain away from the inflammatory focus ptomains and other metabolic products, removing them from the seat of inflammation, carrying them through the general circulation to the intestinal canal, the kidneys and other eliminative sources where they may be finally got rid of. Besides they enable the patient to take large quantities of water, by which the whole body is flushed out, and grave toxemia may be lessened, if not entirely prevented. Diuretics for the same reason will prove of equal benefit, and I know of no remedy for this purpose at all to compare with water, given to the extent of toleration.

CHRONIC URETHRITIS—ITS DIAGNOSIS AND TREATMENT.

By H. A. KLUSSMAN, M. D., PHG.
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The continuance of a urethral discharge for an indefinite length of time after every other symptom of gonorrhoea has disappeared is very common and it constitutes a chronic urethritis. Cases of chronic urethral discharge may be divided into three classes:

1. Catarrhal Urethritis.—This is the continuation of the acute form and presents no symptoms beyond a thin watery discharge or a moisture of the urethra. It is often psychical and the patient acquires the habit of constantly stripping the urethra to see what can be milked out. Sometimes he succeeds in expressing a drop or

two of albuminous fluid, especially in the morning. If let alone the discharge usually ceases in a few days or a week.

Treat.—Constitutional treatment, open air, nourishing diet, abstinence from alcoholic beverages, moderate exercise, regular living and syrup iodide of iron is all that is indicated.

2. Chronic Gonorrhoea.—The inflammation is distinctly localized in certain portions of the urethra and does not invade the whole canal with uniform intensity. It is usually the seat of granulations or ulcerations and the most common situations are the fossa navicularis and the bulbous portion of the anterior urethra. The discharge is of a creamy character, and is generally aggravated by any excess. The discharge can be expressed in the morning and also during the day providing the trial be made a few hours after urinating. At times there is burning on urination and even chordee.

The diagnosis of the portion of the urethra which is affected is arrived at in three days:

(a) Stripping.—The penis should be pressed between the finger and thumb, and the urethra milked systematically. First grasp the penis just posterior to the fossa navicularis, and by several trials, each time grasping it further back, the point will be found from which the discharge can be expressed along the urethra to the meatus.

(b) Bulbous Bougies.—Take a bougie several times smaller than the urethra and pass very slowly, all painful points being carefully noted. The bougies may be increased in size—doing a meatotomy if necessary for their introduction—until it detects a rough tender spot. Pus and blood may be brought away upon the shoulder of the bougie, which is always passed to the proximal side of the sensitive point before being withdrawn.

(c) Urethroscope.—The urethroscope is indispensable in arriving at a diagnosis in chronic diseases of the urethra, and often alone affords the means of adopting a rational and successful plan of treatment. The urethra is red and slightly swollen. Granulations and ulcerations can be readily seen by an experienced eye.

There may be an aching sensation felt during erections, and compression of the urethra during micturition causes pain.

Treatment.—Having located the granulated or ulcerated spot by means of the bougies or urethroscope, it is necessary to make local applications to its surface. Apply by means of the prostatic syringe 5 to 10 minims of a $\frac{1}{4}$ to 10% solution of silver nitrate,

sulphate of copper or better still, apply by means of an applicator through the urethral speculum, as this exposes the foci of inflammation and allows them to be treated more directly.

The irritation caused by the caustic produces a more or less acute inflammation, which generally manifests itself by the discharge being increased for a day or two after which it spontaneously disappears again. The silver nitrate should be followed by injections of astringents such as sulphate of zinc, etc. Irrigations of hot solutions of permanganate 1 to 2,000 will help hasten the cure. If there is much burning on urination, the urine should be rendered bland by the use of a mixture composed of acetate of potash, hyocyanus and boric acid.

3. Gleet.—A form of chronic urethritis in which the discharge is of a muco-purulent character. It is met with after repeated attacks of gonorrhoea or in a first case, which has been of long duration.

The margins of the meatus are found to be glued together in the morning and retains a drop of fluid. At the end of urination there is usually a dribbling of urine. This is an indication of stricture of large calibre and if a bulbous bougie is passed, narrowing will be detected.

Treatment.—Gleet so commonly depends on commencing stricture of the urethra, that the treatment should be really that of stricture. Inject 1 drachm of a 4% solution of cocaine, and allow it to remain for 15 minutes; then examine with olive pointed bougies and find the location and calibre of the stricture. It can then be dilated with steel sounds, passing them twice a week till the urethra is of normal calibre, usually 28 to 32, depending upon the size of the penis. If the meatus is small, do meatotomy so as to allow the passage of the sounds.

Before introducing the sounds, the anterior urethra should be irrigated with hot permanganate solution. Even if there be no stricture, the stimulation of the mucous membrane by the pressure of the metallic sound will have a good effect in setting up a healthy action and arresting the discharge. It is seldom that injections are called for in the treatment of gleet, but if any are to be used, preference is given to hot solution of permanganate 1 to 2,000. If the stricture is recent and soft, gradual dilation will give good results, whereas if it is contractile, irritable and cartilaginous, urethrotomy will have to be performed to cure the discharge.

It is good practice to perform internal urethrotomy in cases of chronic urethral discharge in which all other methods of treatment have failed and even when the urethra will admit a 26 or possibly a 30 French, as the cutting operation often affects a cure and is rarely followed by any bad results.

In chronic urethritis it is important to know the location of the diseased area. A precise means of diagnosing posterior-urethritis is to first wash out the anterior urethra with a 1 per cent. boric acid solution, then inject a $\frac{1}{4}\%$ pyoktanin solution and retain it in the canal for from 3 to 5 minutes, after which it is allowed to escape and the urethra is again washed with the boric acid solution till the washings return perfectly colorless. The patient is now requested to pass his water and if the urinary filaments passed are found to be colored violet it indicates anterior urethritis. If they are colorless they come from the posterior urethra.

THE BACILLUS COLI COMMUNIS IN A POSSIBLY NEW ROLE AS AN INHIBITOR OF HCl SECRETION IN THE STOMACH.*

By G. W. McCASKEY, A. M., M. D.,
Fort Wayne, Ind.

The facts outlined in this note are placed upon record because they suggest what appears to me to be an intensely practical and interesting question in the pathology of gastric secretion and investigation, with a view of directing to it the attention of other workers in the field of gastro-enterology.

Briefly stated, the facts are as follows; The patient, a male, aged 31, was referred to me a few weeks ago by Dr. C. B. Goodwin, of Kendallville, with a history of sub-sternal and epigastric pain and failing health, extending over a period of 6 or 7 months. There was, of course, a suspicion of malignant gastric disease. Washes from the fasting stomach were obtained and found to contain the ordinary cellular detritus of chronic gastritis. In addition to this the secretion was found to be almost a pure culture of the bacillus coli communis, with a few other scattered organisms of various kinds. The identity of the organism was positively established by the usual culture methods, in addition to its morphology and staining properties. No microscopic evidences of malignancy, either in the shape of cellular structure or a typical mitosis, were found.

An Ewald test breakfast was given, and found to contain an abundance of lactic acid, without a trace of free H. Cl. acid.

The stomach was washed out the next evening with about one quart of water, by Dr. Goodwin, and on the following morning a test meal of oatmeal gruel given, which was removed in the usual time and sent to me for analysis, which gave identically the same results—abundance of lactic acid, no reaction whatever with Gunzverg's reagent.

A few days later the patient came to my office for further study. It was decided to repeat the tests already made, and to take extraordinary precautions to free the stomach as completely as possible from micro-organisms. Late in the evening therefore, the stomach was washed with a very large amount of water, several gallons probably being used, until it came away absolutely clean. On the following morning it was again washed, first using soap solution and then irrigating until the water again returned absolutely clear. The oatmeal gruel, (of course free from milk and sugar) was then given and removed in an hour, and to my astonishment there was not a trace of lactic acid, but on the contrary 65 free H. Cl. A full breakfast was ordered and seven hours later another Ewald test breakfast given with exactly the same results. No lactic acid and about 60 free H. Cl.

It should be stated that the secretions, after very thorough Levage, contained a few scattered organisms, morphologically resembling the colon bacillus, but that the remaining infection was very slight indeed.

The remarkable change in the character of the gastric secretion occurring within a few days, raises an intensely practical question as to its cause. The case was one of ordinary chronic gastritis, and symptomatically had undergone no changes.

It appears to me that there are only about three possible, or at least probable explanations of the phenomena.

First—The possibility of variation, due to neuropathic conditions.

Second—The strong stimulation of the gastric mucose by the prolonged irrigation and the mechanical removal of the immense quantities of the bacillus coli communis which was the undoubted lactic acid producer in this case.

While I have seen some remarkable variations in gastric secretion in the same case within comparatively short time as the result

of the first named condition, and while the possibility of modifying the function of the oxyntic glands by local stimulation must be admitted, yet, without entering upon any extensive argument in this case, and taking into account all the circumstances connected with it; I am strongly inclined to believe, without positively asserting it as a fact, that the profuse growth of the bacillus coli communis acted by means of its metabolic products as an inhibitor of H. Cl. secretion.

Further observance would of course be necessary to establish this belief as a fact, but its importance, if true in the diagnosis of cancer of the stomach, seems so important as to justify a preliminary report of the case.

Aug. 31, 1901. 107 W. Main St.

WHAT CAN WE DO FOR OUR CATARACT CASES?

DR. G. W. VAN BENSCHOTEN,
South Bend, Ind.

It may be said that the advancement in the treatment of cataract has not kept pace with that in some of the other branches of medicine; nor has any radical change been made in the operative technique for this affection. The same diversity of opinion, though not so marked, as to the way the corneal incision should be made, still exists, and we also see the same post-operative prolapse of the iris which our forefathers fought against. We still have to contend with the unwelcome escape of the vitreous, and that which we shall probably always dread, the inflammatory processes following operation.

From this you might infer that our cataract cases must go on to inevitable blindness before anything can be done to help them, but such is not the case and the object of this paper is not to discuss the operative treatment, but to show what can be done by hygienic and medicinal measures on patients presenting themselves with beginning cataracts.

There is no cure for this affliction in one sense of the word, but there are measures which can and should be taken, which not only tend to give the patient relief, but to check, either fully or partially the progress of the trouble. We have no specific medication to advance for your use, because there is none; there is no drug or medicine, as far as my knowledge ex-

tends, which can clear away the spokes of a beginning lenticular opacity. I have never seen the least benefit, on incipient or mature cataracts, result from the external use in the eye of any form of medication. This may seem a radical statement to those who have seen the endorsement of a certain drug, which is claimed to not only prevent but remove a cataract. We have faithfully and persistently used this drug, the juice of the *cineraria maritima*, and have yet to see the marvelous benefit which some men have claimed for it; we have used it on cases in their incipency, in maturity, and on the soft form of cataract caused by trauma, and in no one of them was there the least decrease in the opacity. Neither can I say that I have seen it do any harm.

We have also experimented with various other preparations reported in the literature from time to time, as worthy of trial in this disease, and again our results were always nil. Our results from the use of electricity have been the same. Therefore we feel that we can heartily endorse the statement made at the last meeting of the American Medical Association, by Dr. De Schweinitz, in which he says that, "no specific remedy for the treatment of cataract has been found or is there any reliable evidence that drugs exist which cause the absorption of partially or fully formed cataracts."

One oculist, whose name I cannot recall, goes even further and states that the so-called absorption cure for cataract is a myth, and men claiming to remove lenticular opacities by that method are really charlatans.

As to the causation of cataract, and I am speaking now of the hard senile form, we are still in doubt regarding it. We call it senile cataract, but age in itself is not the etiological factor, because this is a pathological condition, not a physiological one. Again, disease of the interior of the eye itself does not determine it, for it exists in many cases without any signs of fundus trouble; and also where these signs are present, the cataract does not commence until after forty years of age in the vast majority of cases. Therefore we must conclude that there is some determining factor, such as disease either local to the eye or systemic plus certain conditions supplied by age, as for instance a physiological change in the lens itself. Disease either by affecting the nutrition of the lens, and this must be acknowledged as correct in most cases, or by a more direct action on the lenticular substance not as yet fully understood.

Choroidal and retinal troubles have been claimed to be the sole

cause of cataract, but every oculist has seen cases where no signs of fundus trouble were present.

What then can be the cause in cases of the latter class not accompanied by choroidal disease? I believe in the great majority of cases the existence of some general disease, or a debility, either associated with or independent of a refractive error.

Every oculist can recall patients presenting themselves with a complaint of indistinct vision, spots before the eyes, etc., and on ophthalmoscopic examination finding the equatorial spokes of an incipient cataract in one or both eyes, and if it is our privilege to be able to follow these cases we may find the same condition present years later with no appreciable increase in the opacity. There seems to be a certain variety of cataract in which no progress is made, a stationary form. Yet we cannot tell these patients that the disease will not progress to maturity and blindness, for we cannot judge positively as to the rate of growth, for some unforeseen sickness, some undue eye-strain may inside of a few months start into activity, this, at present sleeping disease. Neither is it proper for us, assuming a sympathetic tone of voice, to inform these patients that they have a cataract and it is only a question of time before they will become blind in one or both eyes, so playing upon their fears as to cause them to worry, or throw them into a despondent state or a melancholia, which is bad, for their general health and, who among us, can tell what, in this instance, disastrous affect it might have on their eyes. But in some cases you will find it necessary to inform your patient of their condition, otherwise they may persist in going against your advice, which they would not do if the true condition of affairs was explained to them and a warning given as to the probable outcome if they continued to disregard your commands. In these cases a thorough examination should be made as to their general health, and also of their eyes; the fundus may be normal, or show signs of congestion around the disc and periphery of choroid. In these cases other signs and symptoms of asthenopia will be found and the first procedure is to give as perfect a correction as is possible for their error of refraction. It may be that lenses for their presbyopia is all that will be needed, or an astigmatism will be found needing correction; whatever the error is, correct it first, last and all the time as long as it will benefit their vision and so relieve eye strain. An examination of blood and circulatory system should be made and if trouble is found the proper

treatment instituted. The alteratives do good and such drugs as the iodides or mercury may be given. Tonics such as iron or arsenic, especially in cases of anemia or in women when the climacteric is approaching. During this transitional stage of her life you may find cataract making its appearance, and everything possible should be done for her well-being; hours of sleep and recreation, especially in open air regulated, appetite improved, digestion assisted, freedom from overwork, and especially the undue use of her eyes for sewing and reading in poor light prohibited. Limit, or stop entirely, the use of their eyes by artificial light. After the proper lenses have been fitted the physician should see that his patient returns every three to six months for a re-examination and a change in their glasses if found necessary. At first it is often necessary to change quite frequently; no glass should be worn when its use will not fully correct the trouble; an immediate change is imperative. The increasing myopia is often a surprise, and the patients will congratulate themselves on what is called their second sight; but this is nothing for them to feel happy about for it means that trouble is to follow in their eyes.

Where fundus trouble, such as choroiditis or retinitis is present the cause for same should be looked after in the general health and appropriate treatment instituted when found. In every case of incipient cataract, and especially where it is beginning early in middle life, an examination of the urine should be made. The presence of sugar or albumen calls for further search for confirmatory symptoms of diabetes or nephritis. We have seen cataract in diabetis and nephritis. We have seen cataract in diabetics where the disease was held in abeyance for months by a careful regulation of diet, exercise and proper medication, and cases in which the disease immediately became progressive on patients becoming lax in their efforts to maintain good health. Cases in chronic kidney troubles will, as a rule, progress toward maturity much more rapidly and treatment does not retard progress to any great extent. Proper diet, a change if possible to an equable climate and tonics, especially iron in the form of Basham's mixture should be tried.

In chronic rheumatism with beginning cataract, tonics, massage, exercise, etc., are indicated. Gout and all lithaemic conditions are often associated with cataract, the treatment is apparent.

We know that the only cure for cataract is by operative measures and on this method of treatment we shall have nothing to

say. My purpose in addressing these few remarks was to remind you that we can do something for this class of cases other than by waiting for the maturity and then operating. The measures are to prevent the progress of the disease, and not to remove the opacity which has already taken place, for that is beyond our reach at present and will not be influenced by any treatment. Keep your cataract cases in the best possible health by hygiene and medical means, correct any and all refractive errors and so relieve all eye strain, treat any and all pathological condition in the eyes, associated with the cataract, limit the use and allow no abuse of the eyes, and keep your patient under supervision for as long as possible. By these means many a case may have their vision prolonged indefinitely and may save them from ever coming under the operator's knife for this affliction.

SOCIETY PROCEEDINGS.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The twenty-seventh annual meeting of the Mississippi Valley Medical Association was held at the Hotel Victory, Put-in-Bay Island, Ohio, on September 13th and 14th. The meeting was one of the most successful in the history of the Association, there being nearly one hundred papers read or presented by title. The place of meeting was all that could be desired, the famous Hotel Victory being well adapted to the demands of the Association. The hotel is said to be the largest and most handsomely furnished summer hotel in the world, and overlooks the site of Perry's victory in 1813, from which it derives its name. The attendance at the meeting was large and the papers were of a high scientific order.

NOBLE COUNTY MEDICAL SOCIETY.

The annual meeting of the Noble County Medical Society was held in the parlors of the Reyner House at Kendallville, Indiana, on Tuesday, September 3rd. The following program was carried

out: Morning session, "A Few Thoughts, Scattering Perhaps, but of Interest to the Country Doctor," by Dr. J. W. Morr, Albion. Discussion by Dr. C. A. Seymore, Wawaka. Afternoon session, "Clinic," by W. K. Mitchell, Ligonier. Paper, "Endometritis," by Dr. H. D. Wood, Angola. Discussion, Drs. J. L. Gilbert, Kendallville, and W. F. Carver, Albion. Paper, by Dr. J. W. Hays, Albion; Discussion by Dr. Warren Williams, Kendallville.

The members of the society and invited guests from surrounding counties were entertained by the local medical fraternity of Kendallville.

The officers of the society are: President, Dr. J. E. Luckey; secretary, Dr. C. B. Goodwin; treasurer, Dr. J. W. Hays.

THE INDIANA STATE MEDICAL SOCIETY.

The committee of arrangements of the Indiana State Medical Society have decided that the Evansville meeting is to be held on Thursday and Friday, May 22 and 23, 1902. It is thought quite likely that the program will be considerably shorter, as the committee will urge that less but better papers be referred from the County societies. It is particularly desired that the program be a representative one and that every county society in affiliation with the state society refer at least one good paper, and that no county society refer a paper unless it is good and worthy of presentation before an intelligent body of physicians such as annually congregate at the meetings of the Indiana State Medical Society.

The Marion County Medical Society, the largest of the county societies, has taken the initiative in cutting down the number of papers by voting to limit the number of papers referred to the state society to eight, or one for every twenty members.

The committee of arrangements report that already steps have been taken to entertain the society in a substantial and hospital manner.

Without doubt the members from the northern part of the state will feel that it is a long distance to go to attend the meeting, but we feel sure that no one who makes the trip will be disappointed, as the good that will be accomplished by interesting physicians in the southern part of the state, who have never been affiliated with the society, will be incalculable. It is not too early for members to begin thinking of attending the Evansville meeting, and we urge our friends in the northern part of the state to not only arrange to

go to Evansville, but take with them from their county societies some first-class papers.

THE ALLEN COUNTY MEDICAL SOCIETY.

The first regular meeting of the Allen County Medical Society, following the summer vacation, was held in the assembly room of the court house on Tuesday evening, September 3rd. Dr. W. O. Gross presented a paper on "Vinegar and its Therapeutics," which proved to be very interesting and instructive. The various kinds of vinegar as now found upon the market, many of which are adulterated in various ways, were fully described, and particular attention was called to the therapeutic uses of the old-fashioned cider vinegar which most housewives aim to procure. Dr. Gross thought that from the fact that vinegar may be procured in any household, physicians should be thoroughly acquainted with its therapeutic uses.

Dr. Horace Adams presented a paper upon "The Experience from the Effects of an Overdose of Hashish." The essayist's remarks were based entirely upon personal experience, and gave in detail the well-known symptoms following the administration of an overdose of this drug. The discussion which followed seemed to indicate that there is a very great difference in the strength of preparations as prepared by different pharmaceutical houses, as well as in preparations which have been kept for some time. It was thought advisable to administer the drug very cautiously, unless the physiological strength had been previously determined. One discussant laid stress upon the subject of physiological assay as the proper method of determining the therapeutic value of such drugs as cannabis indica, aconite, belladonna, etc., as determined by experiments upon animals. Some of the discussants thought it absolutely essential that in prescribing any of these drugs for their alkaloidal effect the physician should specify only such preparations as are physiologically tested by the manufacturers, and the strength of the preparation duly recorded before employed.

Copies of the transactions of the Indiana State Medical Society were on hand for delivery and the members were requested to secure their copies as soon as possible from the secretary of the society.

The next meeting will be held on Tuesday, September 17th, the program being "Pneumonia, its Treatment, with Special Attention to Iodide Medication," by Dr. L. P. Drayer, and "The Treatment of Acute Lobar Pneumonia with Iodide of Potash," by Dr. N. L. Deming.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

THE JOURNAL-MAGAZINE SPECIAL OFFER.

For every one dollar sent us as a new subscription, or as a renewal subscription to the Journal-Magazine, between the first of September and the first of January, 1902, we will send for one year, to any address, the *Cosmopolitan Magazine*, the net price for which is one dollar and the *Fort Wayne Medical Journal-Magazine*, the net price for which is also one dollar. Let us have your subscriptions before this offer expires.

THE DEADLY MOSQUITO.

Now that it has been clearly proven that mosquitos are carriers of various kinds of contagion, principally in the way of malarial, typhoid and yellow fever poison, a method for the extermination of mosquitoes, or at least a method whereby the mosquito may be prevented from biting individuals is worthy of consideration. The seeming necessity for the prevention of mosquito bites has led to numerous and oftentimes voluminous reports as to the methods to be employed. A correspondent of the *Philadelphia Medical Journal* says that oil of pennyroyal is antagonistic to mosquitoes, and that the little pests will avoid all people or premises

around which has been placed small quantities of the oil of pennyroyal. The New Orleans Board of Health has decided to begin a campaign against mosquitoes by employing Beaumont oil in the localities where mosquitoes are supposed to breed and thrive. The oil is also to be used by householders in the city of New Orleans, who are asked to co-operate with the Board in the crusade against mosquitoes. In Chicago the park boards have adopted the suggestion of Professor Frederick Starr, of the University of Chicago, to plant the castor bean plant in the public parks for the purpose of driving away the mosquitoes.

We have had no personal experience with remedies for the extermination of mosquitoes, but have for many years heard from residents of mosquito infected districts that the castor bean plant, if grown in a few places around a residence will effectually keep the mosquitoes from the premises, even in localities where the little pests abound in countless numbers. It may be a little late to offer the suggestion to cottagers at our summer resorts, but it is well to remember the fact, as demonstrated by Professor Starr, and another season see that the castor bean plant grows at our mosquito infected summer resorts.

The hunter and fisherman who frequently suffers from the bites of mosquitoes, might follow the suggestion offered by the correspondent of the *Philadelphia Medical Journal* and carry with him a small bottle of oil of pennyroyal, which may be used to ward off the mosquitoes.

It may be that the adoption of these simple and inexpensive precautions may be the means of preventing an otherwise possible attack of malarial fever or other infectious disease through inoculation by mosquitoes.

A. E. B.

SUBSTITUTION.

The State of Tennessee has recently passed a law making it a criminal offense, punishable by fine and imprisonment, to substitute any drug in lieu of that prescribed by a physician. This is a step in the right direction and one that should be followed by every State in the union. There is no question but that substitution is a growing evil, and one that not only demands attention at the hands of physicians, but the people who are the greatest sufferers. Of course the physicians also suffer through the fact that a disappointed

client, not receiving the proper effect from the remedy prescribed, is apt to consult another physician.

A physician should not only definitely specify the preparations which he desires to be given the patient, but in every instance insist that the prescription be accurately filled, or not at all. In cases where substitution is detected, the physician should, in those states having a law equivalent to that of Tennessee, prosecute the druggist, or in the absence of a law relative to substitution, the druggist should be effectually boycotted by all physicians and patrons.

We are aware of the fact that a great many physicians very seriously object to compounding their own medicines, but it is not only the fear of substitution, but the fact that substitution is daily practiced by thousands of druggists, which has led many reputable physicians in even larger cities to dispense their own medicines.

We sincerely hope that the stand which the State of Tennessee has taken will be imitated by many other states in the Union at the coming session of their legislative bodies. A little active work on the part of the physicians and reputable druggists is all that is required to start the matter going and eventually secure suitable legislation.

A. E. B.

DR. KEEN AND THE ANTIVIVISECTIONISTS.

In a former number of the *Journal-Magazine* we had occasion to call attention to the public correspondence that passed between James M. Brown, President of the American Humane Association, and Dr. W. W. Keen, ex-president of the American Medical Association, relative to the antivivisection pamphlets that were distributed at the time the bill to prohibit vivisection in the District of Columbia was before Congress. Mr. Brown arraigned Dr. Keen for derogatory and uncomplimentary remarks, as well as criticism of the policy pursued by the antivivisectionists in attempting to secure legal enactments to prevent vivisection. Dr. Keen's reply, while caustic, recited the facts relative to the dishonesty and misrepresentation on the part of the antivivisectionists, and apparently had the effect of temporarily quieting the leaders of the antivivisection society, at least so far as public utterances were concerned. Lately, however, Dr. Keen has been vigorously attacked through the means of anonymous pamphlets, probably emanating from the same source as the original criticism. In a recent number of the *Philadelphia*

Medical Journal Dr. Keen has seen fit to reply to some of the more important charges made in the anonymous pamphlets, while asking the indulgence and pardon of his readers for paying any attention to anonymous attacks. Dr. Keen's reply, however, presents the matter in such a light that the sensible element in the antivivisection society should realize that to continue the discussion is but to do damage to their cause and take from them what little, if any, merit they have in their side of the controversy.

As has been recently stated, the antivivisectionists started after the wrong man when they attempted to hold Dr. Keen up to ridicule. It is to be hoped that the antivivisectionists, wherever they may be, will always find some one with sufficient brains and courage to combat them in a manner equivalent to that of Dr. Keen. A. E. B.

AN EFFICIENT BOARD OF HEALTH.

We do not believe that there is a state in the Union that has such an efficient board of health as Michigan. It must be remembered, though, that the State Legislature of Michigan has been made to realize the importance of placing a sufficient fund at the disposal of the board of health in order to accomplish the work that for several years has been successfully carried on. There is, however, a certain amount of work which might be adopted with profit by the boards of health in the surrounding states without a very marked increase in the expense over and above that already expended for similar purposes, but with less effective results. We refer particularly to the system of "Sanitary Bulletins," which are sent out from time to time to interested persons, and particularly to the teachers in all of the public schools of Michigan. The information contained in these bulletins refers particularly to the cause and prevention of contagious and communicable diseases, and to matters pertaining to sanitary science. It is one of the duties of the teachers of the public schools in Michigan to read and digest the contents of these bulletins, and to further the work of the health board by distributing, at the time of the presence of communicable diseases, pamphlets or other documents that will give the families in which the disease exists, and the immediate neighbors, full information as to the best and quickest way to prevent the spread of the disease.

There is no better way to improve the sanitary conditions of the country, and prevent diseases that are purely preventable, than

by a thorough and systematic education of the people upon these topics, and there is no better or cheaper way of educating the people than by the distribution of such bulletins and pamphlets as are constantly being issued by the Board of Health of Michigan. According to a legislative act of 1895 the teachers in the schools of Michigan must give oral and blackboard instruction, using the data and statements supplied by the State Board of Health in the leaflet entitled, "Dangerous and Communicable Diseases, How Spread and How Prevented." This leaflet deals in a plain and practical manner with the following diseases; consumption, meningitis, influenza, diphtheria, typhoid fever, scarlet fever, measles, whooping cough and smallpox. There is also a law which requires the disinfection of all school rooms and all public places of gathering, and the State Board of Health lays down the general rules and directions under which this disinfection shall be performed.

It may well be said that Michigan is in the front rank in consideration of ways and means for the betterment of the health conditions of Michigan, and Indiana and the surrounding states can with profit take a lesson from Michigan in the manner of conducting public health affairs.

A. E. B.

QUOTING FOREIGN AUTHORITIES.

Some of our American physicians seem to have a mania for quoting foreign authorities in connection with the diagnosis and treatment of a large number of affections, and particularly those affections which require surgical interference. To us this seems not only poor taste, but displays either a lack of appreciation of the scientific work that is being done in this country, or ignorance of it. The time has passed when it is necessary to look to foreign countries for points in the diagnosis and treatment of disease, for nowhere on earth can there be found a more progressive and highly scientific class of medical men than can be found in America.

It is a well known fact that some of the more important surgical operations that to-day are recognized as the standard treatment for certain affections, have not only had their origin, but perfection in the United States, and particularly is this true in appendicitis. The disease was first investigated by an American physician and the treatment was instituted by an American surgeon. It was some years after the operation was a common one in America

before foreign physicians and surgeons would acknowledge that the disease existed. As one of our confreres says, "One becomes quite accustomed to reading French or German articles in which an entire ignorance of American work is shown, but it seems to me that it is a pity that an American physician writing at this time should seek foreign authority for illustrating any point in the diagnosis or treatment of appendicitis." What is true of appendicitis is also true of a number of other surgical affections, which were first treated successfully in the United States, and the credit for the perfection of the operations belongs entirely to American surgeons.

There was also a time when every physician and surgeon thought that it was necessary for him to spend a year or two abroad in order to obtain advanced ideas and methods regarding the diagnosis and treatment of disease. It is now a recognized fact that no man need go beyond the shores of the United States in order to acquaint himself with all of the best and latest knowledge pertaining to the medical profession. It is, of course, admitted that a trip to the large medical centers of Europe, after seeing and learning the work that is being done in this country, broadens and develops a man for his professional career, but that he thus secures any better advantages than can be obtained in the United States is not recognized by those who are in a position to know. It is yet a fad, and in some instances an advertising scheme on the part of the physician, to spend from a few weeks to a few years in some of the foreign medical centers, but the intelligent and more progressive of those who indulge in this practice frankly admit that the benefits derived are in no respects better, and in a great many instances less than can be secured in this country. We have no desire to discourage study and observation in the foreign medical centers, but we do believe that it is high time that many of our physicians cease to credit the medical profession of foreign countries with being so far in advance of us. The facts do not warrant the assumption that in any country on earth there is more intelligence or enterprise and progression in the medical profession than in America.

A. E. B.

PROTECTION FROM MALPRACTICE SUITS.

We have recently been informed that a prominent young physician in a populous Indiana town, who within two or three years

has built up a very lucrative medical practice, has been successfully blackmailed rather than submit to the annoyance, expense and publicity of a trial for malpractice.

The patient received a fracture of the bones of the lower leg, and upon receiving surgical attention at the hands of the physician in question, was very promptly and emphatically informed that, though recovery would take place with good movement of the leg, there would unquestionably be a slight shortening which would require the wearing of a "built-up" shoe. Everything was satisfactory until the physician some months after the accident presented his bill for the services, whereupon the patient threatened a suit for malpractice on the ground that as a result of unskilled surgery the leg had been permanently shortened. Unprincipled witnesses were even brought to the point of testifying in the presense of the physician that they had heard him say that the leg would be perfect in every respect after he got through with it. Fearing damage to professional reputation, and probably pecuniary loss resulting therefrom, the physician finally, against his better judgment as well as the necessities of the case, paid \$300 to settle the matter in full.

We believe that not only was this entirely wrong, but that it will be the means of encouraging a repetition of such unprincipled and dishonest attacks as that made upon this young physician. There is a principle at stake which should warrant every physician in defending himself in cases such as that cited. A man's reputation suffers much more when it becomes known that he has paid an indemnity for the sake of avoiding a suit, than it would were he to stand trial and vindicate himself in court. Then again, the bare fact that he has agreed to settlement out of court, whether he is guilty or not, lays weight to the belief that he was guilty and settled rather than suffer further consequences.

It is quite evident that cases of this character are more common than is generally supposed, but there is a safe and satisfactory way to avoid the trouble which dishonest and unscrupulous patients and their lawyers frequently cause physicians. There is at the present time an incorporated company, with a home office in the city of Fort Wayne, composed not only of reputable but substantial business men with ample capital back of them, that is prepared to issue policies to any and all physicians, the terms of which make it incumbent upon the Company to defend the policy-

holder in any and all malpractice suits to the extent of \$10,000, and to appeal the case to the highest court in the land, if necessary, in order to win. In other words, the Company stands ready to secure legal vindication of the physician, and to pay all expenses required to bring about such a result. Very few patients and their unscrupulous lawyers will attempt a suit in the face of knowledge that \$10,000 in cash lies ready to be expended in the defense of the physician, if need be. No physician, no matter how competent or careful he may be, is proof against malpractice suits, and it behooves him to be prepared for such a complication. He can in no better way prepare himself for this trouble than by taking out a policy in some reputable company which defends physicians against malpractice suits.

A. E. B.

THE OPEN AIR TREATMENT OF PHTHISIS.

A great deal has been said about the open-air treatment of phthisis, and the benefit which has been derived from this plan of treatment is vouched for by a large number of competent and trustworthy observers. Dr. Hector MacKenzie, of London, who was one of the first, and is now one of the foremost to advocate this plan, argues that an open-air treatment should be what its name implies, consequently he advises that tuberculous patients be kept in the open air during sunshine and storm, during heat and cold, during day and night. His most striking cases were kept on an open balcony at St. Thomas Hospital for months. And all this, it is to be remembered, was done during the changes and inclemencies of a London autumn and winter. A patient, for instance, with a tuberculous cavity in the right upper lobe, with hemoptysis, fever and rapid emaciation, (a patient in other words who was in a rapid decline), was put out of doors in his bed, and kept there constantly night and day for six months. In a month's time his temperature became afebrile, his appetite returned, his sputum diminished, hemoptysis ceased, and his weight began to increase. He gradually gained twenty-eight pounds and acquired a complexion of red and tan. At the end of six months he left the hospital restored to health.

The requisites for this treatment are simple in the extreme. The patient is kept warm in bed, not only with blankets, but with such other aids, if needed, as hot-water bags, gloves, and a woollen

cap. He is fed almost to excess. The treatment in fact may fail if the patient is not literally bullied into eating heroically. Moreover, the patient is isolated and not allowed to talk except to doctors and nurses.

A. E. B.

SUBCUTANEOUS INJECTIONS OF PARAFFIN.

In the August number of the *Journal-Magazine* we published an abstract, the report of Gersuny, upon subcutaneous injections of paraffin for the correction of deformities and anatomical defects. Since the publication of Gersuny's article several observers who were working along the same lines have published their experiences and report the results secured by subcutaneous injections of paraffin as very satisfactory providing the proper method has been carefully and intelligently carried out.

The method employed by Gersuny, as described in the last number of the *Journal-Magazine*, seems likely to be the one most generally followed, and is worthy of trial by any experienced physician. In the correction of deformities, particularly in that variety known as the "saddle-shaped" nose, the injections will prove of much value, and will be greatly appreciated by that class of individuals who desire to secure the best cosmetic effect through the adoption of any treatment that holds out hope of satisfactory results. So far as reported the injections are wholly without local disturbance, and the paraffin is not absorbed but retains the position assumed by it in the moulding process performed by the operator after the injection.

A. E. B.

EVILS OF CLOTHES.

The editor of *Medicine*, in an editorial in the August number, has this to say in his defense of the wearing of the shirt-waist. "We have again been treated to an exhibition of men walking our streets, in atmosphere reaching 100 degrees F., attired in woolen coats and vests, and beneath these white shirts with fronts in them misnamed "bosoms" starched to the stiffness of a board. A still deeper strata is called by courtesy "light summer underwear," sodden with perspiration, redolent with odors easily perceptible when a passing zephyr displaces some of the outer clothing. Last year we discussed the shirt-waist, and we were then of the opinion that a

triumphing common sense would lead mankind to the adoption of this sensible innovation in dress for summer wear. It seems, however, that fashion has irrevocably decreed that woman alone shall look clean, cool, comfortable during the hot summer months, and that man shall go fretting, fuming and perspiring and exhaling foul odors."

To all of which we say amen, but recognize the fact that the disapproval of the wearing of shirt-waists by men has arisen largely through a lack of independence on the part of the very men who are most anxious to wear this cool, cleanly and becoming attire during the heated term. It needs but the stamina and independence of a few gentlemen in each locality to make it, if not fashionable, certainly proper to wear shirt-waists. It seems ridiculous and absurd to think of a man wearing a shirt-waist being shunned by society and not worthy of association with people in any public place of amusement, yet we are told that early in the summer the manager of a vaudeville theatre, at one of our parks not far from the city of Fort Wayne, issued orders that no man or boy wearing a shirt-waist should be admitted to the theatre. Perchance he discovered that if the order was enforced throughout the season it meant a large pecuniary loss from the fact that over half of the male patrons of the park wore shirt-waists, for at any rate the heated term was not half over before the audience at the theatre in the afore mentioned park presented a very liberal sprinkling of shirt-waists on the male members attending the performance on any hot night.

We have to add that any gentleman, in the strictest sense of the word, can, if he will, wear the shirt-waist or any other garment that is cleanly, comfortable and tasty, without offending the senses of any sensible people. We also know that he can wear it without being shunned by society, and without being debarred from any place of amusement. It needs but a few enterprising and independent gentlemen in each locality to adopt the innovation to popularize it. In the name of comfort and cleanliness, and with all due respect to neatness and propriety, let men wear shirt-waists if they will.

A. E. B.

NEWS NOTES AND COMMENTS

A "STABLE BOY" A NECESSITY.—It is desirable that even the humblest country doctor should have the services of a "stable boy." Besides the positive danger of infection of patients from the contact of the physician with the horse, there is that indescribable odor which is always present after contact with horse or harness. This odor is offensive to most people when well, and doubly so when ill; combine it with the common accompaniment of the smell of horse manure, and you have a combination which is repulsive and nauseating. Avoid it by employing a hostler, and wearing gloves whenever you leave your office.—*Medical World*.

A DANGEROUS AMUSEMENT.—"Loop-the-Loop" is the name of a new entertainment which goes further in the way of tempting Providence than anything yet invented. The "Loop" is an immense circle of track in the air. A car on a mimic railway shoots down a very steep incline, and is impelled around the inner side of this loop. Part of this journey, of course, is made "heads down," the people in the car retaining their places by the great centrifugal force. The authorities at Coney Island are said to have prohibited "looping-the-loop" because women break their corset strings in their efforts to catch their breath as they sweep down the incline, and moreover, a young man is reported to have ruptured a blood vessel in his liver. We predict other accidents from this contrivance yet. No persons with a weak heart or bad arteries should try it.—*Philadelphia Medical Journal*.

THE CHICAGO TRIBUNE'S IDEA OF ADVERTISING BY THE MEDICAL PROFESSION.—The *Chicago Tribune* has had considerable to say regarding the insincerity of medical men in adhering to the code of ethics, and with reference to advertising has the following to say editorially:

"To the outsider this standard of conduct (condemnation of

the medical advertiser) smacks strongly of insanity, and that it is not unreservedly subscribed to by doctors themselves is shown in the fact that the most "ethical" of them all, while they would shrink in horror and dismay from paying regular advertising rates, are always accessible and even effusive when the interviewer comes around. It is ethical, in other words, to blow one's own horn free in the news columns, but heterodox and unprofessional to advertise and pay for it. That seems to be the sum and substance of medical ethics."

OUR EFFICIENT COUNTY HEALTH OFFICER.—The monthly *Bulletin of the Indiana State Board of Health* has the following to say regarding Dr. Proegler:

County Health Officer Proegler, of Allen County, is most energetic in the execution of his duties. Lately, one Chas. Campbell died in Allen County near Fort Wayne. The remains were carried away in the night by an undertaker from the town of Garrett, which is in DeKalb County. Said undertaker removed the body without authority and before a certificate and record of death had been issued, and buried it in his own county after securing a burial permit from a local officer. The proceeding was not in accord with the laws, and Health Officer Proegler, together with Coroner Barnett, followed the matter up and demanded that certificates and permits should be regular. The matter finally ended in the coroner of DeKalb County disinterring the remains, holding an inquest and regularly reporting the death as the law requires. A few such cases as this will teach the most stupid undertaker that he can not carry bodies around the State in the dead of night and bury them at his own sweet will.

DOINGS OF FORT WAYNE PHYSICIANS.—Dr. Miles F. Porter spent two weeks at the lakes around Rome City during the latter part of August. He reports that the outing did him much good, but tells some very large yarns about the size and number of fish he caught.

Dr. E.J. McOscar spent two weeks during the latter part of August visiting Buffalo and other eastern cities.

Dr. Albert E. Bulson, Jr., spent ten days on an eastern trip, visiting the Pan-American Exposition and extending his trip up the St. Lawrence to Montreal and Quebec.

Dr. Will Stemen returned the latter part of August from an extended visit at Denver, Colorado.

Dr. G. A. Ross is now in Wyoming on his annual hunting expedition. He expects to return some time in October and will undoubtedly bring back some large game, as he bears quite a reputation as a hunter.

Dr. G. B. M. Bower attended the Knights Templar conclave in Louisville and extended his trip to several southern cities where his two weeks' August vacation was spent.

Dr. J. D. Chambers visited a week in Detroit and Canadian cities during the early part of August.

Drs. G. W. McCaskey and K. K. Wheelock, who spent a large portion of the summer at their cottages at Rome City, have returned to the city with their families.

ENNO SANDER PRIZE.—The Enno Sander Prize has for 1901-1902, been generously increased by its founder to consist of a gold medal valued at one hundred dollars and one hundred dollars in cash. The subject for this year is "The most practicable organization for the medical department of the United States army in active service." The conditions of the competition are:

1. Competition is open to all persons eligible to active or associate membership in the Association of Military Surgeons of the United States.

2. The prize will be awarded upon the recommendation of a board of award selected by the executive committee. The board will determine upon the essay to which the prize shall be awarded, and will also recommend such of the other papers submitted, as it may see fit, for honorable mention.

3. In fixing the precedence of the essays submitted, the board will take into consideration—primarily—originality, comprehensiveness and the practicability and utility of the opinions advanced, and—secondarily—literary character.

4. Essays will consist of not less than ten thousand, nor more than twenty thousand words, exclusive of tables.

5. Each competitor will send three typewritten copies of his essay in a sealed envelope to the secretary of the Association, so as to reach that officer on or before February 28, 1902.

6. The essay shall contain nothing to indicate the identity of the author. Each one however will be authenticated by a nom de

plume, a copy of which shall, at the same time as the essay, be transmitted to the secretary in a sealed envelope together with the author's name, rank and address.

7. The envelope containing the name of the successful competitor will be publicly opened at the next succeeding annual meeting of the Association, and the prize thereupon awarded.

8. The successful essay becomes the property of the Association of Military Surgeons of the United States, and will appear in its publications.

The board of award for 1901-1902 is composed of Honorable William Cary Sanger, Assistant Secretary of War; Brigadier General George Miller Sternberg, Surgeon General United States army, and a distinguished officer of the line to be announced later.

John Van Rensselaer Hoff, President. James Evelyn Pilcher, Secretary, Carlisle, Penn.

THE YOUNG DOCTOR HAS COME.—The new graduate is now among us "in abundance." He comes with the idea that he has mastered all the deep mysteries of medicine, and like Pare, feels that nothing further can ever be discovered. His egotism is to be excused, for he undoubtedly has learned more theoretical and scientific medicine than we have had opportunity of absorbing. He looks on us as out of date old fogies, and we gaze upon him in amazement for his presumption in putting his book lore against the clinical wisdom gleaned through many years of arduous practice.

He settles near us, and some of our best patients go to him. He is somewhat more enthusiastic than we in answering night calls, and his practice grows. He seems to be winning from us, and human nature seems to demand that we feel "sore," and show it. Soon there is an open rupture, and the people say that the "old doctor" is jealous.

There are redeeming features in the matter; if he gets some of our best patients, he is coerced into attending many whom we are glad to be rid of. He gladly welcomes night work; but we would rather sleep. He wins practice, but we are still busy. If he glories in his perfect knowledge of the latest developments in bacteriology, we may tell him some facts learned by sad experience. He has unbounded faith in humanity, and we may be somewhat softened by his zeal. We need each other, and it is a mistake if we drift apart

when we should be mutually attracted. The old doctor may learn much from the younger competitor, and he should be glad to do so; the younger man should give due respect to the older physician's mature judgment. We like to cultivate the acquaintance of young physicians; while they may smile at our ignorance and antiquity, we are amused at their freshness; so both parties are entertained. While they laugh at us, we are learning from them; while we laugh at them, we try to give them some of the fruits of our long experience. The older man is too pompously dignified; the younger man is too impudently independent, and the breach is widened.

Let us get together; learn from each other; bear with each other's frailties; and get along well together. Let the old man learn that he is growing old; that he has not fully kept pace with medical progress; that younger men must eventually supersede him. Let the young man learn that the older practitioner views him somewhat as an interloper; let him be satisfied to humor the old man's whims; let him respect the matured experience of arduous years; let both be charitable, and let both be honest; and let both work for the best interests of themselves and their patients.—*Medical World.*

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

PROFESSOR KOCH'S ADDRESS ON TUBERCULOSIS.—*American Medicine*, Aug. 3, 1901.)—The central figure in the Tuberculosis Congress just held in London was unquestionably Robert Koch. His address before the Congress was the feature of the meeting and attracted much more attention, at least among the laity, than any medical event in recent times not barring the discovery of the mosquito's disease-carrying powers.

Koch's standing in the scientific world had been somewhat impaired by his tuberculin and tuberculin R claims, but he had almost fully rehabilitated himself by painstaking studies, such as few men of his position and age would undertake, on malaria and rinderpest. When, therefore, he made his announcement regarding bovine tuberculosis, the world listened in almost breathless silence. Though Koch has said nothing new—for others had maintained the non-identity of the human and bovine tubercle bacilli—he has presented the subject with his customary clearness and incisiveness, and has brought forward original experimental evidence that seems incontrovertible upon one point—that human tubercle bacilli are incapable of producing tuberculosis in cattle. Yet there is a possible fallacy in these experiments. Koch's animals were, we may presume, in hygienic stables and in general under good conditions. What would happen if cows were exposed for a considerable period to the inhalation of tuberculous sputum or to the action of tuberculous material in poorly ventilated stalls is an important question. Those, however, are the conditions as they actually exist in many places.

The more important question, as to whether bovine tuberculosis

is communicable to man, is left unanswered by the experiments. In the nature of things, direct laboratory proof is impossible. Koch relies therefore entirely upon clinical evidence—upon the extreme rarity of primary intestinal or feeding tuberculosis. We have ourselves been struck with this fact, and have agreed with Northrup, of New York, that even in children, tuberculosis is acquired in the vast majority of instances by inhalation, rather than through milk or food. Yet the rarity of clinical evidence does not constitute certain proof of the innocuousness of the bovine bacillus for man. Those parts of cattle habitually consumed by human beings are rarely extensively tuberculous, but if the lungs and lymph-glands were eaten it is quite possible that tuberculosis would be produced.

We cannot feel that the legislation so laboriously obtained for the destruction of tuberculous cattle should be abrogated. Rather would we urge that Congress at its next meeting appoint a commission to take up the subject and study it in all its possible phases. If Koch is proved to be right, which we at present cannot help doubting—then two things are gained: Firstly, money, through the utilization of animals now condemned, and secondly, the battle against tuberculosis is concentrated and simplified by the removal from the field of one enemy.

Koch's announcement seems to have been wind for the sails of those who oppose the etiologic importance of the tubercle bacillus. How they can find any argument in the address in favor of their view we fail to perceive. The non-identity of the two germs—the bovine and the human bacillus—does not weaken the bacteriologist's standpoint in the least. The origin of species permits us to understand how the human, the bovine, the avian and the piscine tubercle bacilli could readily be species or variants of one parent stock, which in time became diversified by adaptation and heredity.

It might be contended, if by passage through the cow and through the human subject, the tubercle bacillus can be so altered that new species are formed which are non-interchangeable, that the same thing might take place in man; that by residence in a given human body or series of bodies, the tubercle bacillus might suffer certain modifications which would render it incapable of producing disease in any human being except one constituted like that from which it came. Theoretically, this may be true; practically, the dissimilarity between human beings is immeasurably so

much less than that between man and cattle that a bacillus pathogenic for one individual would be pathogenic for vast numbers of the human race.

The terrible frequency of tuberculosis—and postmortem investigations show it is even more common than is clinically demonstrable—indicates that whatever its modifications, the pathogenicity of the bacillus extends to a huge fraction of the human race. The bacillus of Koch is as much the cause of tuberculosis as Laveran's plasmodium is of malaria. We grant a certain degree of importance to the "soil," but to do so does not disparage the dignity of the bacillus. The soil must of course not be neglected in the conflict, and the State must do everything in its power—by factory inspection, tenement legislation, etc.—to maintain the health of the workers, from whose ranks the army of tuberculous is largely recruited.

But our chief weapons are notification, disinfection, proper disposal of the sputum, and, if Koch is wrong, the condemnation of tuberculous meat and milk. All these measures have for their object the destruction of bacillus. It is so with the plague—granted that if the disease enters, some will be immune because they do not constitute the proper soil, yet if we keep out the germs all will escape.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

CURIOUS CONTENTS OF A HERNIAL SAC.—Varied as are the structures that have occasionally been found in herniae, one can hardly fail to be astonished at the findings in a case lately reported to the Brussels Medical Circle by M. Derveau (*Gazette hebdomadaire de médecine et de chirurgie*, August 1st). The patient was a person sixty-nine years of age with a congenital inguinal hernia. Within the hernial sac there were found a uterus, Fallopian tubes, and a vagina. The scrotum was empty, but in each of the broad ligaments there was a normal testicle. The subject was the parent of

six children. This is said to be the third case of the kind on record.
—*N. Y. Med. Jour.*

MEASUREMENTS OF GIRLS IN PRIVATE SCHOOLS AND OF UNIVERSITY STUDENTS.—Arthur MacDougal, in the *Boston Medical and Surgical Journal*, August 1, presents tables showing the results of the measurements of girls in private schools and of women university students. His observations are of interest. He finds that girls in the private schools in Washington and Chattanooga are much more sensitive to pain than girls in public schools; that the girls in the private schools are less sensitive to heat and locality on the skin, but more sensitive to pain before puberty than after puberty. Considering university women, he has found those of poor nutrition, when compared with others, are inferior in weight and strength, in distance between the orbits, corners of the eyes and from crown to chin, and in distance between zygomatic arches. In general the blondes are inferior physically to the brunettes. The first born (men and women) are more sensitive to pain than the second born, and the second born are less sensitive to pain than the later born.—*Ph. Med. Jour.*

HEALTH HINTS.—*The Dietetic and Hygienic Gazette* gives the following health hints:

Eat less.

Drink less at meals and more between meals; sparingly of iced drinks. Avoid all stimulants and drink no water of questionable quality. Tea is a mocker and strong coffee is raging.

The best hot weather foods are cereals, fresh vegetables, ripe fruits, eggs and milk. For variety, nuts, fresh fish (extremely fresh), and now and then for a relish a slice or two of canned bacon, nicely broiled. (Armour's is exceptionally fine. Other brands may be equally good.) Avoid salted fish, cheese, fine crackers, and all other constipating foods.

Bathe more.

Keep the emunctories one and all free, open and active. It is in hot weather that ptomains and toxins are so rapidly engendered. Keep them washed out.

Wear porous clothing, linen open-mesh underwear, if you can

afford it. Change and air it as often as possible when perspiring freely.

Let narcotics alone.

Take needed, but not excessive, exercise in the open air.

Don't rush. The next train will carry you at the same price, and may be a great deal safer than the one you will lose by not hurrying.

Keep your temper well in hand. This will make ten degrees difference in the temperature.

Finally, the water-still and filter cost a little care and cash; but it is better to pay ten dollars for one of these preventives than risk typhoid, pay the doctor a hundred, or the undertaker twice as much.

REMOVAL OF THE GASSERIAN GANGLION FOR TIC DOULOUREUX.—Dr. Henry T. Williams, in the *Philadelphia Medical Journal*, reports a case of tic douloureux, in a patient thirty-eight years of age, apparently cured by the removal of the Gasserian ganglion. The patient had been previously operated upon three times for the affection, once the nerve on the right side of the face being divided, and once the inferior maxillary bone being trephined, and later the superior maxillary ganglion being removed, all without producing any permanent relief.

Dr. William's first operation consisted in opening the cranium in the temporal region above the zygoma, and dividing the nerves from under the sphenoid lobe of the brain. This operation gave no relief and a few days later the opening in the skull was enlarged, exposing the ganglia and nerves. About one-fourth of each nerve was resected, and the distal ends of the nerves were pushed through their foramina with a probe; the proximal ends of the nerves, with the Gasserian ganglia were scraped out with a small curette and a probe was passed into the Gasserian fissure and the fissure well scraped with it. Two years have elapsed since the operation and a quite recent report from the patient indicates that there has been no return of the neuralgia, or unpleasant effects experienced from the operation.

SURGERY OF THE PROSTATE.—Dr. Wm. N. Wishard, of Indianapolis, in a paper upon this subject read before the Indiana State Medical Society and published in full in the *New York*

Medical Journal of August 17th, concludes as follows: "Operative procedures are of the greatest value when undertaken early, and where they are long deferred, serious resultant bladder, urethral and renal diseases make the outcome increasingly dangerous. It should also be remembered that where the catheter has failed to give adequate relief, death is reasonably certain to occur ere long, especially in cases where the urethra has greatly increased in length by the elongation of its prostatic end, unless the suprapubic opening, for either prolonged drainage or for the removal of the obstruction is made. If the symptoms are not of a severe type and are not amenable to the catheter, and if the length of the urethra from the meatus to the point where the urine is obtained does not exceed nine inches, a perineal opening generally affords opportunity for stretching the entire length of the prostatic urethra, for dividing the small collar-shaped growths around the bladder end of the canal, and for removing the small projections by the finger, forceps or cautery. One-fourth, or, as asserted by some, one-third of the operative cases are suitable for perineal opening. If the suprapubic operation has been thoroughly done and the obstruction all removed, the patients afterward are assured of more perfect bladder function than by any other method. It must be conceded, however, that, in view of the serious dangers involved, many cases should be subjected to nothing more than the formation of a suprapubic channel, as suggested by McGuire and modified by Morris. Morris's improvement lines the channel with skin, and hence it is not so apt to contract.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

INFECTIOUS OPHTHALMIA IN CATTLE.—A bulletin from the Purdue University experimental station calls attention to the prevalence of an infectious eye disease which effects cattle and some-

times sheep. The state veterinarian says that the disease has been found to be produced by pus germs, and that its infection is unquestioned. The symptoms are both local and constitutional, generally the body temperature is raised, the appetite interfered with and rumination checked. When first effected one or both eyes are nearly closed with swelling of the lids, and the eyes water and discharge profusely. A white film forms over the eyes, which may become dense and the cornea will bulge forward owing to the pressure of abscesses from within. Yellow spots from the size of a pin-head to that of a grain of corn form, and indicate the site of an infectious ulcer. The course will last from three to six weeks, but it rarely happens that there is complete blindness in both eyes. The treatment recommended is protection from the light as much as possible by keeping the effected cattle in the shade of a woods or in the barn during the middle of the day, and locally to apply in the eye equal parts of finely powdered boracic acid and calomel, by means of a small insect powder blower.

REMOVAL OF THE INCUS FOR PROGRESSIVE HARDNESS OF HEARING.—In an article upon this subject, in the *Philadelphia Medical Journal* of August 17th, Dr. Charles S. Burnett disputes the prevailing theory that progressive impairment of hearing and its accompanying symptoms, tinnitus aurium and vertigo, are due to disease of the middle ear. He believes that the catarrhal symptoms are not to be regarded as primary and causative, but as secondary and resultant, or accessory and complicating.

Among the objective symptoms the most prominent are the changes in the position and appearance of the membrana tympani and ossicles of hearing. The drumhead becomes opaque, lusterless and retracted from contraction of the tensor tympani muscle. The malleus handle, instead of being nearly vertical in position, is drawn backward and upward, and appears foreshortened. In this process of retraction the membrana tympani is brought nearer the inner wall of the drum cavity, and in many instances the promontory of the cochlea, and the incus-stapes joint become visible through the membrana.

The immediate result of retraction of the membrana and malleus is retraction of the incus and stapes, with impaction of the latter bonelet in the oval window. Impaction of the stapes is all the more readily produced if the stapedius muscle is weakened by

a lesion of the facial nerve from which the muscle obtains innervation. In a normal ear the impaction of the stapes in the oval window and consequent compression of the labyrinth fluid in the vestibule receives compensation by an outward movement of the membrane of the round window. But in progressive hardness of hearing, changes occur in the membrana, which render it stiff and unyielding to intra-labyrinth pressure, and its compensatory bulging outward toward the tympanic cavity is hindered or destroyed. Hence impaction of the stapes in progressive deafness is followed by disastrous pressure on the terminals of the auditory nerve in all parts of the labyrinth, resulting in deafness, tinnitus, and at least in some instances, ear vertigo.

Dr. Burnett was the first to suggest for the relief of this condition the removal of the incus, and many years ago demonstrated that by the liberation of the impacted stapes, through removal of the incus, and consequent interruption of the retractive power of the tensor tympani, tinnitus aurium and ear vertigo are relieved. The operation, however, improves the hearing either not at all or very little, but it does not diminish the hearing in the ear operated upon, and certainly arrests the progress of the deafness in it. Another thing worthy of note is that the opposite ear, if already effected, will frequently begin to improve, or at least show marked signs of an arrest in the progression of the deafness.

In seventy-eight cases operated upon for progressive hardness of hearing, Dr. Burnett reports that in the majority of cases there was an absolute arrest of progression of deafness, and in all a cessation of the tinnitus aurium and vertigo. The operation recommended consists in making an incision with a delicate knife close behind the short process of the malleus and following closely the periphery backwards and downwards until reaching a point below the line drawn horizontally through the umbo of the membrana. The flap thus made should be pushed inwards towards the promontory by means of a probe armed with a small dossil of sterilized cotton. The incus being now in plain sight, it should be gently disarticulated from the stapes by drawing the former outwards and downwards by means of an incus knife passed behind its long limb. When this is done the long limb of the incus should be grasped by special forceps and drawn very cautiously downward and outward into the auditory canal and then removed entirely from the ear. When this is done the operation is finished. The slight bleeding that some-

times occurs in these cases requires no attention. The rest of the conductors of sound are left intact. The meatus should be stopped with sterilized cotton and the ear let alone for 24 or 48 hours, unless the cotton in the meatus gets moist with blood or serum. If this occur the cotton should be removed and dry cotton inserted. There is to be no after treatment in such cases, as all is accomplished when the incus is removed. As a rule there is no reaction in these cases and the wound in the membrana heals up as intended. The patient is seldom, if ever, obliged to remain in his room for more than 24 hours.

FORMALDEHYDE IN OTITIS.—In an article upon this subject in *American Medicine*, Dr. N. G. Ward says that formaldehyde, when properly employed, is an excellent remedy in the treatment of suppurative otitis. The ear is first cleansed, and the pathological conditions ascertained in detail. If the perforation is small and will not permit free drainage, an incision is made. The head is inclined to the opposite side and a solution of formaldehyde (5 drops to 1 oz. of water) is instilled with a dropper so as to fill the middle ear and the external canal. For home treatment, if the secretions are thick, lysol is ordered, 15 to 30 drops in half a glass of water, and the ear syringed with this by means of a soft rubber pus-syringe. In cases not requiring syringing the patient is instructed to pour five to ten drops of the warm formaldehyde solution into the ear night and morning, and to assume the horizontal position for ten minutes after. Forty cases were treated by the author with marked success, the discharge ceasing on the average in a week. In acute cases, weaker solutions of formaldehyde must be used, 1 to 3 drops to the ounce. This method promptly reduces small granulations and exercises a healing influence over ulcerations.

EVISGERATION WITHOUT THE NECESSITY OF WEARING ARTIFICIAL EYES.—Huizinga, *Annals of Ophthalmology*, Abstract *Journal of Eye, Ear and Throat Diseases*, describes a new operation which does away with the necessity of wearing artificial eyes. In brief it is as follows: The sclera is pierced about one-quarter of an inch posterior to the limbus, just below the insertion of the external rectus. The cernea is left intact. The contents of the eyeball are now carefully removed. A circular piece of the posterior

portion of the sclerotic, including the optic and ciliary nerves, is excised. A fenestrated metal ball is now introduced. The cornea finally becomes opaque, and is then tattooed black in the centre to resemble the pupil, and with the color of the fellow eye's iris, around periphery. There is very slight reaction, no danger of sympathetic ophthalmitis, and artificial eyes are not necessary.

(It occurs to us that the difficulties attending the successful tattooing of the cornea, so as to get the color and appearance desired, would preclude the possibility of the operation being very extensively employed. The cosmetic effect is a matter of great moment to the majority of patients, and it would certainly require a great amount of experience and skill to create an appearance in an opaque cornea that would correspond with the appearance of the fellow sound eye and remain so unchanged. The failures reported, and also the numerous reported cases of severe inflammation following tattooing, should lead us to hesitate in deciding to adopt the above plan.—Ed.)

BOOK REVIEWS.

ETIDORHPA Or The Strange History of a Mysterious Being and the Account of a Remarkable Journey, by John Uri Lloyd, author of *Stringtown on the Pike*, etc. Revised, recast, reset and printed from new plates, carrying new chapters excluded from previous editions. Illustrated by J. Augustus Knapp. Cloth. \$1.50. New York. Dodd, Mead & Co.

This book, which the author very properly terms "a novel of mystery," was issued privately in 1895. The discussion which followed led to successive editions, the present being the eleventh. In this edition chapters excluded from former editions have been given a place, thus enlarging and making the book complete. Since the phenomenal sale of "*Stringtown on the Pike*" by the same author, which appeared from press a little over a year ago, the earlier writings of Dr. Lloyd have enjoyed a corresponding increase of sale, and the revised edition of *Etidorhpa* will undoubtedly receive increased attention through the wide-spread reputation which the author has recently received.

Etidorhpa is a strange story of a journey through the earth, with theories on sunshine, gravitation, energy and other questions now agitating the scientific world. The work abounds in romance, yet the author does not lose sight of the truths of science, which he adorns with grace and beauty.

Some criticism might be made of the manner in which science, mythology, theosophy and morals are mixed, yet the whole is so entertaining and properly blended that the interest never lags, and the reader is left with no ideas that are antagonistic to moral or religious belief.

The publishers have done their work well. The illustrations are from the hand of an artist and add much to the pleasing features of the book. The large type and substantial buckram binding are evidences of an appreciation of the tastes of the reading public.

A. E. B.

A TEXT-BOOK OF OPHTHALMOLOGY.—By John W. Wright, A.M., M.D. Professor of Ophthalmology and Clinical Ophthalmology in the Ohio Medical University; Ophthalmologist to the Protestant Hospital, Columbus. Second edition, revised and enlarged. Octavo, containing Three Hundred and Seventy-eight Pages with One Hundred and Seventeen Illustrations. Cloth, net, \$3.00. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

A copy of the first edition of this work was reviewed in the *Journal-Magazine* two years ago. That a second edition should be warranted is proof of the value which the book has attained as a student's text-book and work of reference for the general practitioner. In this second edition particular endeavor has been made to include the latest and most improved treatment for all eye affections. The chapters dealing with the diagnosis and treatment of such diseases as usually first come to the attention of the general practitioner, such as the purulent ophthalmias, conjunctival granulations, corneal ulcer, interstitial keratitis, iritis and glaucoma receive very careful consideration, and alone make the book equal to any of the encyclopedic treatises on the eye for the use of the general practitioner. An interesting chapter upon tests for color vision has been added. The illustrations have been improved and increased in number, and the mechanical appearance of the book somewhat improved. The glossary at the end of the book is a valuable feature that will be appreciated by all students. The author very frequently unduly emphasizes the importance of adopting his special treatment for various affections, to the exclusion of treatment recommended by other authorities, but this does not prove a serious objection. Altogether the work is a worthy addition to our rather formidable list of ophthalmological text books, and is an improvement upon the first edition which rapidly found favor with students and general physicians. A. E. B.

PULMONARY CONSUMPTION—Pneumonia and Allied Diseases of the Lungs; their Etiology, Pathology and Treatment, with a chapter on Physical Diagnosis. By Thomas J. Mays, A. M., M. D. Professor of Diseases of the Chest in the Philadelphia Poly-Clinic; Visiting Physician to Rush Hospital for Consumption. Illustrated. New York. E. B. Treat & Company, 241-243 West 23d St. 1901.

This volume takes up the subject of consumption and allied

diseases of the lungs from a point of view peculiar to the author. His views on the nature of pulmonary tuberculosis have been placed before the profession in the medical journals from time to time, and are more or less familiar to the profession. Perhaps the most striking view advocated is the assignment to the nervous system of the predominant role in the etiology of the disease. Certain it would seem that the author has somewhat, many will think, greatly exaggerated this factor, yet there is little doubt that there is a substratum of truth in the view set forth. So long as specific infection is kept in mind, especially in regard to prophylaxis, but little harm can come from emphasizing the importance of a healthy and vigorous nervous system. When this point of view is carried so far however as to consider the disease a neurosis, relegating the specific organism to an unimportant position, as the author appears to do, we must part company with him at this point in the road.

The evidence is absolutely conclusive in the opinion of most physicians that there is only one cause of pulmonary consumption, using the term in its narrower sense as the synonym for pulmonary tuberculosis, and that one cause is the tubercle bacillus; all other causes, whether they be neuropathic, or nutritional, or something entirely different, must be regarded in the light of all present knowledge as secondary in character and importance; and if left to themselves they could never produce a case of pulmonary tuberculosis while the world stands. That they are favoring conditions without the germ of which tuberculosis would often prove inactive no one doubts.

Aside from the pathological vagaries which will really serve a good purpose of emphasizing the importance of a high grade of health as the best protective measure against tuberculosis, the book is one of great practical value. His discussion of the treatment of consumption, pneumonia, bronchitis, etc., will be of interest and value to every practitioner. The book bears upon every page the impress of bold original thought, fearlessly uttered. While compelled to differ from some of the views taught in it, I wish to express my admiration for the manner in which the author's work has been set forth. I feel certain that no physician will rise from its perusal without having been immensely benefitted and been placed in possession of broader views upon the subjects with which it deals.

G. W. M.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

HYDRIATICS IN THE TREATMENT OF CHLOROSIS.*

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Fort Wayne, Ind.,

Professor of Clinical Medicine, in the Fort Wayne College of Medicine.

In calling especial attention to this particular method of treatment in chlorosis I wish at the outset to disclaim any intention of exalting it upon a specific or exclusive pedestal. My purpose, on the contrary, is to present its claims for fuller recognition as an important factor, in what I conceive to be the rational treatment of chlorosis. Although it is not my intention to enter at length into the pathology of chlorosis I must ask your indulgence for a brief statement of certain physiological, pathological, and clinical data which appear to me to argue strongly for a somewhat broader therapeutic conception than appears to commonly obtain.

Turning at once to the blood as presenting the most distinctive features of the syndrome known as chlorosis we find a marked oligochromemia as the most constant and distinctive feature usually associated with varying grades of oligocythemia. Although but little stress is laid upon it by most writers, there is, I believe, a greater degree of oligemia than is usually recognized. Landois says, for

* Read in a symposium on chlorosis before a joint meeting of the Chicago Medical Society, and Chicago Society of Internal Medicine, January 1901.

instance, that the corpuscles are absolutely diminished even one half though relatively unchanged.

This could only mean a true oligemia or a reduction in the total mass of blood while the hematocytometer would show an apparently normal condition. We are unfortunately in possession of no method which would enable us to scientifically determine the total mass of blood and we can only judge from the clinical phenomena presented by any given case. As bearing, however, upon the activity of the hematogenetic organs, and also as presenting therapeutic indications of the first importance, this is a question deserving of serious attention in every case. The appearance of these patients sustains Landois' assertion.

The circulatory apparatus shows notable weakness and disturbances of various sorts. The heart weakness is manifested symptomatically by dyspnea on exertion and palpitation, and objectively by varying grades of dilation usually without any compensating hypertrophy, and various rhythmical disturbances. There are vasomotor perturbations as shown by coldness and pallor of the extremities, flushing of the surface in some cases, etc., which disturbances there is good reason for believing are duplicated in internal organs and help to make up the clinical picture: to which may be added occasional exophthalmos and thyroid enlargement, and Moriez's significant observations of exaggerated pulsation in peripheral vessels. Turning to the phenomena of metabolism we find a remarkable retention in most cases of subcutaneous and intravisceral fat, in strange discord with the pallor and prostration presented by the patient; while the chemical study of the urine shows the phenomena of a more or less extreme hypozoturia and other evidences of a greater or less deficiency of those retrograde metamorphic changes which are the necessary expression of functional activity. The frequent gastro-intestinal disturbances very possibly have, as Clark and others believe, a certain etiologic relation, but in addition they are the expression of lowered blood tension and defective oxidation with the necessarily resulting lowered nutrition of both mucosa and muscularis.

In the way of anatomical changes I will only mention the hypoplasia of the cardiovascular and genital organs pointed out by Rokitsky, Kiwisch, and Virchow, which is not by any means constant, although Rokitsky uniformly found these conditions in all incurable cases; together with the fatty and other degenerative changes

occurring, especially in the heart and blood vessels, as the expression of defective oxidation, and more or less in common with other anemias. Such briefly appear to be the principal data to be kept in mind in considering these cases from a therapeutic standpoint.

Before considering the special application of hydrotherapy, I wish to call attention to a few facts regarding the administration of iron. This straw has been threshed over a number of times, but I believe it will bear it once more. Two facts seem to be generally conceded, first, that iron is very valuable in the treatment of chlorosis; and second, that the merest fraction of the iron administered is absorbed. Bramwell, in his recent brochure on anemia, advises the administration of Bland's pills in gradually ascending doses, beginning with three and increasing up to twelve pills three times per day. Expressed in metallic iron this is a daily intake of .27 to 1.13 grammes, or 4.3 to 17.5 grains. Several points are worth noting. First the amount of iron thus administered increases as the patient improves, and the deficit of hemoglobin becomes less and less. The maximum daily dose of iron is more than one half the total amount of iron contained in the blood of a girl weighing fifty kilograms, or about 110 pounds. We have only to examine the feces to ascertain where the iron goes; and this suggests the possibility, if not probability, of some sort of mechanical or chemical influence upon the intestines, where the actual arena of digestion and absorption must be sought, which favorably effects digestive processes. Whether it is bactericidal, whether it is a chemical or mechanical stimulus to intestinal secretion or motility, or whether it is something entirely different from these cannot perhaps be answered, but these possible methods suggest themselves as furnishing a plausible explanation of the undoubted value of iron in chlorosis.

Another interesting fact is the great stress which recent writers place upon rest in conjunction with iron. Bramwell and Strumpehl both emphasize the importance of rest in bed and dwell upon the more brilliant results obtained in hospital than in home treatment. Salinger and Kalteyer in their recent work entitled "Modern Medicine" also express similar views and say that some cases will recover by rest in bed without drugs. Rest under proper conditions means less work for the heart, less expenditure of nerve force, and a greater capacity for maintaining those hydrostatic conditions in digestive organs and bone marrow, upon which hematosis depends.

Taking all the evidence together it appears that the action of

inorganic iron in the treatment of chlorosis is indirect. But what of it? Simply this, that if the action of iron is indirect, it places other indirect methods in the same category and emphasizes the importance in severe or refractory cases or in the occasional cases in which the iron salts disagree of either supplanting or supplementing the latter to such an extent as seems indicated.

In attempting to convey iron to the red cells we are only meeting one indication; chlorosis is not simply iron starvation. It is much more than this. Its essential nature perhaps is not at present fully understood, but it seems to me, contrary to Bramwell and others, to indicate that the genesis of red cells in the bone marrow is impaired by some sort of functional or structural disease. The quality of chlorotic blood is that produced by overworked blood making organs. It is precisely what we get as the final result of anemia from severe hemorrhages. We first have in such cases an oligemia with a normal cell count and normal color index; a little later the blood volume is rapidly augmented by fluid and we have a relative oligocythemia; while a little later still the overworked bone marrow produces cells deficient in coloring matter and at a certain stage we find typically chlorotic blood, the oligemia and oligocythemia have disappeared and the ologochromemia alone remains. Thus the primarily healthy but exhausted and overworked bone marrow gives us the same blood picture as does the bone marrow of the chlorotic patient. There may be no more disease of the bone marrow in one case than in the other but simply a depressed functional state resulting from the associated disturbances of vascular tension and metabolism. A further parallelism between post hemorrhagic anemia and chlorosis is found in the observations of Lazarus that the platelets are greatly increased in both conditions while the not infrequent appearance of myelocytes in both chlorosis and post hemorrhagic anemia points to disturbances of the bone marrow.

It is at least an interesting observation, that the cardiovascular and genital organs, the defective state of which have been noted have a common embryonic origin, being derived from the mesoblast. This fact, taken connection with the frequently noted family tendency, and frequent recurrences, to say nothing of the apparently close relationship to tuberculosis would seem to point to a basal developmental defect as a favoring, or possibly even necessary condition for the typical cases of chlorosis.

The functional integrity of any organ is largely a question of

hydrostatics and osmosis and the bone marrow is no exception to the general law. While it is obviously inaccessible to direct methods yet it is not so to indirect ones. Nearly fifty years ago Kolliker penned the following sentence: "With this abundant vascular supply, and certainly not sluggish molecular change, it cannot be surprising that the bones should be so richly furnished with nerves, the principal function of which appears to me to consist in the regulation of the conditions of the vascular system, by their conveying to the central organ (spinal cord) through the sensitive fibres intelligence of the state of the vessels, and the quantity of nutritive fluid in the bone, and probably also of the modus of the molecular change going on in themselves, and by means of the motor elements bringing a reflex influence from it, to the arteries and veins which are manifestly furnished by contractile fibres." Through the medium of these nerves and by methods of external stimulation of which hydrotherapy stands at the head, we can produce, it is fair to assume, the same impression upon the invisible circulation of the bone marrow that can be demonstrated in the more accessible areas.

I might refer in this connection to Schiller's observations of tonic constriction of pial vessels in trephined rabbits upon cutaneous thermal stimulations; of Naumann, who absolutely demonstrated that these results are partly reflex nervous phenomena; of Winternitz's plethysmographic tracings showing increased volume and tension of blood in areas removed from the direct impress of cold; and, as bearing upon the tonicity of every muscle fibre in the body, and especially those of the heart, blood vessels, and digestion, the brilliant work of Vinaj and Maggiori showing the remarkable influence of cold bathing upon the fatigue curve of muscles.

By such measures we will quicken the circulation and the cellular metamorphoses which lead up to the formation of fully developed erythrocytes and also hasten the molecular and chemical changes upon which the formation and intracellular fixation of hemoglobin depends. This in part explains the beneficial influences which hydrotherapy has been clinically demonstrated to exert upon the functions of hematogenesis, but of course this is only a partial explanation. The lowered blood tension, clinically recognizable in the pulse and scientifically demonstrated by Bihler with the sphygmometer, in every one of fifty cases of chlorosis examined, is an insurmountable obstacle to the functional integrity of every organ of the body, the bone marrow included. Properly applied hydrotherapeutic pro-

cedures will probably do more than any other one thing towards strengthening the heart and improving the vascular tone and in so doing will accomplish as much toward the proper formation of hemoglobin, which requires much more than simply the presence of inorganic iron, as the administration of the latter, in however large quantities it may be given, fully proves.

Along with the efforts at improving the mechanics of the circulation and quickening the sluggish tissue metabolism so characteristic of chlorosis, it is of course taken for granted that it is necessary to supply abundant nutrient material, especially including an abundance of iron both as the nucleoalbuminates of food, and at least for the present, the pharmaceutical preparations of iron. Forced feeding, a rational treatment of the associated gastrointestinal atony by mechanical or other means regardless of whether it is a cause or an effect; rest in bed in cases where this appears to be indicated combined with exercise in the open air; properly graduated gymnastics begun at the right time, with suitably selected hydropathic measures at least in severe and intractable cases would appear to meet the indications presented and ought to give us prompter and better results.

Such has been the case in the hands of most of those who have tested these methods. Strumpel says that baths are of distinct service and he advises either plain or salt baths at 90 to 95 degrees F., with a duration of 15 to 20 minutes two or three times a week. Immerman says that in the treatment of chlorosis, bathing and the exposure to the impact of waves exerts a powerful influence on nutrition hostile to the development of chlorosis. Winternitz in speaking of the douche and shower says that disturbances of nutrition and of blood elaboration, anemia, etc., are accessible to these procedures. Baruch says that in those conditions in which nutrition, hematoses and tissue changes are disturbed a favorable field is offered for the remedial application of water. He especially recommends the douche, but says that like a two edged sword it may inflict damage when carelessly used. On the other hand little or no attention is given to it by many writers, and Murri and Marcus, quoted by Stengel, have found the effect of cold in general to be deleterious. Certainly the same principles must guide us in the use of cold water in chlorosis as would guide us in any other chronic nutritional disease with lowered vitality, and there are doubtless many cases in which the application of cold would be irrational at

least in the earlier stages of the treatment. Unless the ultimate result of the impact of cold is an elevation and not depression of bodily heat it may be definitely stated that it is doing harm rather than good.

In practically all cases which I have treated by these measures the application of cold has been preceded by storage of heat which enables us to get the tonic and stimulating effects of cold without the undesirable depression and lowering of tone which would otherwise result. Time will not permit me to enter into any details of cases nor to say much in regard to details of methods. In an average case of chlorosis I have satisfied myself from personal observation that the hot douche mobile of the French, followed by cold similarly applied and carefully graduated force of impact to the physiological state of the patient improves cardiovascular tonicity, stimulates the general innervation of all the organs of the body and hastens the restoration of the blood toward a normal state. Other methods, milder or more severe, and with varied technique may be indicated in individual cases, but their recital is beyond the limits of this paper.

A REPORT OF TWO INTERESTING CASES OF CHRONIC RHEUMATISM.

By E. J. YAGER, M. D.,
Graysville, Ind.

Probably there is no class of cases which so thoroughly taxes the resources of the practitioner as the chronic forms of rheumatism. The least exposure of these patients to cold and dampness is apt to give rise to acute exacerbations, with increased impairment of the affected joints. One of the most prominent symptoms is apt to be the pains, and in view of the chronicity of the disease it is very important to avoid the systematic use of the opium alkaloids in order to prevent the risks of habituation.

Recently I have had occasion to treat several cases so successfully with the method of treatment described below that I have deemed it worthy to carefully report two typical instances of this kind.

Case I. Mrs. C. B., aged 42, 5 feet six inches in height; weight 220 pounds, of light complexion, and mother of ten children, came under treatment on March 18, 1901, for rheumatism. The patient complained of much pain and swelling of the left shoulder,

arm, and hand. She had suffered from frequent attacks of rheumatic pains for the last 20 years, and had tried the usual alkaline treatment, together with the coal-tar derivatives and other anodynes, with but transitory relief. On examination the following was noted: Temperature 97.2 degrees; pulse rate 88; tongue slightly coated, but thick and loggy; appetite variable, and bowels irregular. I began treatment, after attention to the general emunctories, with aspirin in 5 grain doses, every two hours during the day, enjoining a faithful observation as to the time of administration of the drug. March 19th the patient had rested better than on the previous night, and was suffering little from pain, but her arm and hand were quite weak and useless. Appetite excellent, but bowels still disordered. March 20th, she had passed a restful night, and said that the new medicine had done her much good. March 21st, she felt comfortable; the temperature was 98.3-5 degrees; pulse 72; the tongue clean; the bowels moving freely, and the kidneys active. Her general appearance was much improved. She seemed more herself than for some time past. The same treatment was continued, with complete relief of pain and soreness of joints. March 23rd, I found my patient in great distress, the pain having returned, and the joints being sore and slightly swollen. On inquiry I learned that she had walked a mile to visit a neighbor, thereby exposing herself to a cold damp wind. Examination revealed a temperature of 100 degrees; pulse rate 92; tongue clean; bowels regular, with moderate activity of the kidneys. I forbade any further exposure and continued aspirin in five grain doses every two hours during the day. There had been no gastric disturbance; no tinnitus aurium. March 24th, the patient was doing nicely; temperature and pulse rate normal; tongue clean; bowels regular; kidneys acting well; good appetite and fairly good digestion. I ordered aspirin in same dose as before, but lengthened the time of the administration to four hours. March 25, I found my patient still on the mend; no pain, no fever, no swelling, and no tenderness of the joints; pulse rate normal; sleep excellent; appetite good, and very fair digestion. May 15th, she continues perfectly well, shows no evidence of rheumatic trouble, and attends to her household duties as in former years before she became a victim of rheumatism.

Case II. H. N., female, aged 46 years, height 5 feet 4 inches, weight 190 pounds; complexion light, mother of two children, both grown to womanhood, has been a great sufferer from rheumatism

for many years. She came under treatment on March 22, 1901. Examination revealed the following: Temperature 100 degrees; pulse rate 108; tongue heavily coated; bowels constipated; right arm and hand swollen and tense, and pain extreme. On questioning her I learned that she had been under treatment of several physicians, and had taken almost everything on the market, both regular and irregular, and had tried the great patent medicine curealls of the country, but to no purpose. The attacks of rheumatism recurred frequently, being of variable duration from a few days to as many weeks. My first object in the treatment was to establish a proper action of the emunctories, which I regard as essential before administering the special remedial agent. I administered aspirin in 5 grain doses repeated every two hours during the day, believing that it would afford rest at night. I gave no morphia or other anodyne, but depended solely upon the aspirin. I did not see the patient again until the 28th, six days after the first administration of the drug, when I found the temperature normal; pulse rate 80; tongue clean; bowels regular; kidneys acting nicely; appetite good; pain and swelling all gone from the right limb, but some swelling in the left arm and leg. The patient claimed to feel much better in every respect, and said that she had been relieved much quicker than on previous occasions, and had slept well the first night after commencing the treatment. I saw her again on the 30th, and found her free of fever; pulse normal; bowels regular; kidneys active; appetite good; digestion excellent, and all pain and swelling gone. I now ordered aspirin in 5 grain doses every four hours during the day, feeling assured that none would be required at night. Rest is very essential in rheumatism, and my experience shows that aspirin so relieves pain that the patient is able to sleep. April 8, I saw her again, and found every organ functioning properly, and the patient in an excellent condition.

I wish to say in closing this report that in my hands aspirin has not induced tinnitus aurium, nor has it ever interfered with the digestion or impaired the appetite. In every instance in which severe pain existed, this was allayed in from six to twelve hours, and in none of these cases in which I administered aspirin was it necessary to resort to opium or its alkaloids, or any of the coal-tar derivatives. I shall in the near future report a series of cases of neuralgia treated with aspirin, but feel warranted in saying that in twenty-five years of practice I have found nothing so sure and reliable in its action in antagonizing rheumatism as this drug.

AN ANOMALOUS HEART.

By DR. N. L. DEMING,
Fort Wayne, Ind.

The following case seems to me of sufficient rarity to warrant report:

Mrs. M., primipara, age 28, housewife, was confined July 10th; labor normal, position left occipito anterior. The child, a male, weighed 7 1-2 pounds, and appeared healthy. On the tenth day



FIG. 1.

the mother developed malarial fever quinin—but by the 15th day she was convalescent, the puerperium being otherwise uncomplicated.

The child was breast-fed, and when I left the case fifteen days after delivery, was thriving. One month later I was called to see the child, being told that for some time he had not seemed well and

was not gaining in weight—the immediate complaint being diarrhoea.

Examination of the breast milk showed increase in butter fat. The mother's diet was changed and the child's digestive disturbance diminished. At this time I noticed that the hands and feet presented



FIG. 2.

a cyanotic appearance, but it was of such slight degree that I attributed it to the existing indigestion.

One week later I was hurriedly called and found the child suffering from dyspnoea. I was told that these attacks occurred every 6 to 8 hours, and lasted for only a few minutes. The whole body was decidedly cyanotic, and the child appeared seriously ill. Temperature normal; respiration slightly increased; rapid and shallow during attack of dyspnoea, and pulse varying from 110 to 120.

At this time the digestive functions were normal, and the child

had gained in weight. Examination of the heart was very difficult and unsatisfactory. I informed the parents that the child had a serious heart affection. No treatment was given except rest and quiet, with restricted diet. Ten days later the child was found dead in bed.

Autopsy—Child 10 weeks old; rigor mortis extreme two hours after death; body very blue. Pericardial sac contained one-half ounce fluid. Heart, size normal; external appearance, normal; right auricle distended; right auriculo-ventricular opening closed; foramen ovale closed; left auricle, normal; left auriculo-ventricular opening and valve normal. Both ventricles were found opening freely into one another. In fact, the inter-ventricular septum was absent altogether, the only evidence of it being represented by a tough, fibrous cord, about 1-8 inch in diameter. The ventricle did not seem distended, the heart muscle being normal. On more minute examination, the superior and inferior cavae were found in normal position entering the right auricle. The foramen ovale showed unmistakable evidence of having been closed for some time—since birth, undoubtedly—and the right auriculo-ventricular valve was only represented by firm, thick fibrous tissue, with no communication whatever with the ventricle. The left auricle appeared normal, and the ventricle besides the cord representing the septum already mentioned showed the orifices of the pulmonary artery and aorta opening close together, more inclined to the right side than normal, both to the right of the interventricular cord, and therefore, both opening from what one would term the right ventricle.

The circulation during intra-uterine life can be easily explained, the foramen ovale providing the outlet from the right auricle. After birth, with this closed, the circulatory apparatus was limited to one auricle and one ventricle—to the aorta, the pulmonary artery and veins, and the coronary arteries.

I think one of the most surprising features in this case is the fact that the infant lived 10 weeks—that death did not occur shortly after birth.

The photographs show in Fig. 1 the ventricle exposed throughout its entire extent. The arrow pointing to the left auriculo-ventricular valve and at its termination, the cord (marked A) which was the only remnant of the ventricular septum discovered.

Fig. 2 shows the right auricle exposed, the foramen ovale and the closed auriculo-ventricular valve.

PRESIDENT MCKINLEY'S CASE.

By H. V. SWERINGEN, A. M., M. D.,
Fort Wayne, Indiana.

The disposition manifested in certain quarters to criticise the medical and surgical treatment of our lamented President McKinley is, it seems to me, somewhat gratuitous and unfair. If a man's foresight was as good as his "hindsight" there would be fewer occasions for criticism. It is a very easy matter to say what ought to have been done and what ought to have been left undone, after an autopsy has disclosed the true condition of a case. Without holding any one of the medical gentlemen in attendance upon Mr. McKinley responsible for his death, I merely wish to remark that the illustrious patient did not have the constitutional vitality and power of resistance with which he was generally accredited.

I have practiced medicine long enough to know that it is not always the hearty, robust-looking man who is possessed of the greatest powers of resistance and endurance. Dr. Rixey testified to the fact that an irregular, rather weak pulse was one of the President's physical characteristics, and the autopsy revealed the fact that his heart's walls were abnormally thin. These facts alone are sufficient to satisfy me that the predisposition to gangrene existed when the President was shot, and the wound he received simply constituted its exciting cause which led to his death.

While Mr. McKinley presented the appearance of the most robust health, he was not a robust man possessed of the normal resisting force. Men of his general physique are not necessarily healthy. I would not by any means choose him as a patient for the treatment of pneumonia or typhoid fever, or of any acute disease. Had our present President received the same wound, I believe the result would have been different.

Gangrene means the death of a part because of the cutting off of its supply of blood. Mr. McKinley's circulation was simply not active enough to keep the parts along the track of the bullet bathed with the life-giving current. Gangrene and resultant toxins could not therefore have been prevented. The regular hypodermatic injections of strychnia and digitalis should have been administered at intervals of two or three hours, beginning immediately after the receipt of the injury and kept up until convalescence was fully established or death resulted. This probably was the treatment in-

stituted. I do not know. I do not believe in waiting under such circumstances for symptoms of collapse to manifest themselves. I would rather prevent them from appearing by an early resort to the remedies used to combat them when they do appear.

It may possibly have been the case that the President was diabetic without yet furnishing any evidence of the existence of that disease. I understand that his physician had treated him successfully through a most pronounced attack of la grippe. In my experience diabetes mellitus occasionally follows this disease as a sequel.

Of course, traumatic gangrene in a case like the President's can not be treated as it could be if located on a limb and after the line of demarcation had been formed. Spreading traumatic gangrene may be the result of an infection but in my opinion the infection in the President's case was not primary or due to a poisoned bullet as has been suggested.

THINKS DOCTORS HASTEN DEATH.

District Visitor (to old woman): Why, Mrs. Malage, haven't you seen a doctor?

"Why ma'am, my husband don't hold with no doctors. He do say I'd better die a natural death."—*Exchange*.

BEAUTIFUL SURROUNDINGS.

"Do you think it will take, doctor?" asked the fair young bud who was being vaccinated.

"Well," replied the gallant doctor, "if it doesn't take on such a pretty arm as that, I'll have no respect for vaccine hereafter."—*Exchange*.

SOCIETY PROCEEDINGS.

ALLEN COUNTY MEDICAL SOCIETY.

The regular meeting of the Allen County Medical Society was held in the assembly room of the court house in Fort Wayne on Tuesday evening, October 1.

The principal paper of the evening was by Dr. Miles F. Porter, his subject being, "Infection as a Causative Factor in the Production of Abortion." The paper was the direct outgrowth of a discussion which occurred before the society some months before, on the occurrence of abortion in the presence of infection. The essayist said that but few authorities mention the fact that local infection may be a causative factor in the production of abortion, though his investigation of the subject seemed to point conclusively to the fact that infection is a frequent cause of abortion. Cases were sighted to show that pregnant women inoculated with gonorrhoeal infection, or any other local infection, frequently abort as a direct result of the local infection. In the cases cited care was used to eliminate such well known causes of abortion as the contagious fevers, and other systemic disturbances.

In the discussion of the paper, several members of the society reported cases very similar to those reported by the essayist, and agreed with him in the main as to the point brought out in the paper.

Along the line of miscellaneous business, the society took a decided action upon the subject of "division of fees," by passing the following resolutions:

"RESOLVED, That the offering or the giving of a commission or precentage of a fee by a consulting physician or operating surgeon, or the asking or receiving of such a fee or commission in any guise whatsoever by the physician referring the case, is dishonest, disreputable and unethical, unless such arrangement be made with the full knowledge of the patient.

"RESOLVED, That a violation of this resolution shall subject the offender to expulsion from the Society."

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

THE JOURNAL-MAGAZINE SPECIAL OFFER.

For every one dollar sent us as a new subscription, or as a renewal subscription to the Journal-Magazine, between the first of September and the first of January, 1902, we will send for one year, to any address, the *Cosmopolitan Magazine*, the net price for which is one dollar and the *Fort Wayne Medical Journal-Magazine*, the net price for which is also one dollar. Let us have your subscriptions before this offer expires.

THE ASSASSINATION OF PRESIDENT McKINLEY.

The news of President McKinley's assassination, which occurred on the afternoon of September 6th, came too late for notice in the September issue of the *Journal-Magazine*, and at this writing our readers, probably without exception, are familiar with all the details in connection with the tragic event which justly excited international interest and sympathy and which eventually terminated in a fatal result on September 14.

As the twenty-fifth president of the United States, William McKinley had begun his second term of office under more than favorable skies. When the American people first bestowed upon

him the greatest gift which the Nation can bestow, William McKinley was known as a man of the people, rich in tact, prudence, kindness, and a keen knowledge of the requirements and desires of his constituents. But above all this he was known among those who knew him best as a man of intense honesty, of pure morals, and a burning desire to deal justly and rightly with not only all people, but with all propositions with which he might be confronted, as near as possible as he saw justice and right with the sense that was given him for the purpose. His advance from the ranks of the common people was rapid, but no more rapid than his talents and character warranted, and as he ascended the steps of his broad career his ability to handle the problems connected with the destinies of the American people became recognized as being superior and worthy of more far-reaching adaptation. To this perhaps is due the fact that at the time of the convening of the national conventions in 1896 for the selection of candidates for election to the presidency of the United States, there was an almost universal clamor among the adherents to McKinley's political faith, from Maine to California, for his nomination as a candidate for the highest office in the gift of the people. That the judgment of the American people in placing him in the highest office of the land was not at fault, has been fully demonstrated by his masterly handling of the State problems connected with the many momentous events of history which have occurred since his first inauguration on the 4th of March 1897. No president has ever faced greater cares and responsibilities, and no president has ever met those cares and responsibilities with more courage, tact, discretion and honesty of purpose.

In the light of candid and sober reflection, we can truthfully say that William McKinley was a great man, and his name will shine as a sagacious statesman, and his pure and blameless life will forever stand as a mark of adoration for the generations living as well as unborn, who worship at the shrine of ability, character and honesty of purpose in man.

A. E. B.

THE CAUSE OF PRESIDENT MCKINLEY'S DEATH.

Quite naturally the management of the McKinley case has excited an abundance of criticism as well as praise from those who are fully acquainted with all of the facts in connection with the case, as well as those who are to a large extent ignorant of the conditions that prevailed.

To our mind, the medical and surgical attention which President McKinley received from the time that the fatal bullet penetrated his body on the afternoon of Sept. 6th, until his death in the early morning of Sept. 14th, was practically above criticism from first to last. The ability of the medical men who saw the case first, and of those who were later called into consultation, is unquestioned, and upon their judgment rested all of the details in connection with the treatment of the case.

That even men of recognized ability and experience should come in for criticism in connection with the treatment of such an illustrious personage as the president of the United States is to be expected; but that they should receive criticism at the hands of the more intelligent and conservative of the medical profession, is beyond explanation.

With the authentic history of the case before us, together with the official report of the results of the post-mortem examination, we believe that we can say that the management of the McKinley case would not, under similar conditions all the way through, have been materially different in the hands of any other competent and experienced physicians and surgeons.

From the official reports of the case, as given in *The Journal of the American Medical Association* and other large weekly medical publications which were furnished official reports, we learn that President McKinley was shot from the front with a 32-caliber ball, entering five inches below the left nipple, and one and one-half inches to the left of the median line. It traversed the abdominal cavity, perforating both anterior and posterior walls of the stomach, the opening in the former being small, the one in the latter large and ragged—just the character of wound usually made by a pistol ball at very close range. After thorough closure of the gastric wounds, from which there had been some extravasation, a careful search was made for other possible injuries. None were discovered, and the surgeons were reasonably certain that the bullet had found lodging in the muscles of the back. The abdominal cavity was freely irrigated with normal salt solution, and closed without drainage by through-and-through sutures of silkworm gut. A small piece of clothing—presumably from the undershirt—had been carried in by the bullet; but was, we understand, from the statements given out, found in the abdominal portion of the wound.

Commenting upon this *The Journal of the American Medical*

Association says: "In exploring the abdomen, Dr. Mann acted wisely in enlarging the original wound, rather than performing median section. Irrigation of the cavity is to be distinctly commended; likewise the use of interrupted sutures, saving as they do the loss of time, and facilitating to no inconsiderable degree, when rightly placed, drainage—two very important elements in the President's condition.

"Whether or not provision should have been made for further drainage depends entirely upon the existing conditions, and they were best judged by the distinguished surgeons charged with the responsibility of saving, if possible, the most precious life in the world. The profession has had the utmost confidence in each of them; the Nation has shown its gratitude for the promptness with which their awful responsibility was assumed, and the thoroughness and ability with which it was carried out."

The official report of the autopsy should silence all criticism. It was made on the day of death and signed by representatives of the government, family, and the medical profession. It is as follows:

"The bullet which struck over the breastbone did not pass through the skin, and did little harm. The other bullet passed through both walls of the stomach near its lower border. Both holes were found to be perfectly closed by the stitches, but the tissues around each hole had become gangrenous. After passing through the stomach, the bullet passed into the back walls of the abdomen, hitting and tearing the upper end of the kidney. This portion of the bullet track was also gangrenous, the gangrene involving the pancreas. The bullet has not yet been found. There was no sign of peritonitis or disease of other organs. The heart walls were very thin. There was no evidence of any attempt at repair on the part of nature, and death resulted from the gangrene which affected the stomach around the bullet wounds, as well as the tissues around the further course of the bullet. Death was unavoidable by any surgical or medical treatment, and was the direct result of the bullet wound.

Harvey D. Gaylord, M. D.,
Herman G. Matzinger, M. D.,
P. M. Rixey, M. D.,
Matthew D. Mann, M. D.
Herman Mynter, M. D.

Roswell Park, M. D.

Eugene Wasdin, M. D.

Charles D. Stockton, M. D.

Edward G. Janeway, M. D.

W. W. Johnston, M. D.

W. P. Kendall, Surgeon, U. S. A.

Charles Cary, M. D.

Edward L. Munson, Assistant Surgeon, U. S. A.

Hermanus L. Baer, M. D.

In the certificate issued by the coroner the cause of death is given as gangrene of both walls of the stomach and pancreas following gunshot wound. It is signed by H. R. Gaylord, H. Z. Matzinger and James F. Wilson, coroner.

There have been published in various newspapers throughout the country reports to the effect that there was much disagreement among those who attended President McKinley, and upon being apprised of the fact that these reports were being circulated broadcast throughout the country, the attending physicians issued the following statement:

"The undersigned surgeons and physicians who were in attendance on the late President McKinley have had their attention called to certain sensational statements recently published in the daily papers, and particularly one New York paper, indicating dissensions and mutual recriminations among them.

"We desire to say to the press and public, once for all, that every such publication and all alleged interviews with any of us containing criticism of one another or of any of our associates are false, and are nothing but scandal-mongering.

"We say again that there was never a serious disagreement among the professional attendants as to any of the symptoms or as to the treatment of the case or as to the bulletins which were issued. A very unusual harmony of opinion and action prevailed all through the case.

"The unfortunate result could not have been foreseen before the unfavorable symptoms declared themselves late on the sixth day and could not have been prevented by any human agency.

"Pending the completion and publication of the official reports of the postmortem examiners and attending staff, we shall refuse to make any further statements for publication, and alleged interviews with any of us may be known to be fictitious. Signed, Mat-

threw D. Mann, Roswell Park, Herman Mynter, Eugene Wasdin, Charles G. Stockton. Buffalo, Sept. 17."

In full consideration of the facts as officially presented to us, we feel constrained to agree with the opinions expressed in a leading article in *The Journal of the American Medical Association* of Sept. 21, which we quote as follows:

"It is not unusual for physicians or surgeons to make mistakes in judgment, and therefore it often occurs, when a case is ended and death supervenes, that those who have been in attendance look back and wish they had done a little differently here or there. Such things are liable to occur until the time comes when human judgment is infallible. But reviewing the facts of President McKinley's case from the beginning, so far as they have come to us from reliable sources, and supplementing the reports by all that we can reasonably surmise, we see no reason for the slightest criticism of the surgical and medical treatment. Whatever medical science could do at the present time was apparently done. The administration of a minute quantity of solid food on Wednesday, which has been criticised, appears to us to have been perfectly justifiable and that it could have had no ill effect is sufficiently proven by the autopsy. From the prompt acceptance of responsibility by the surgeons at the beginning to the last sad phase, there is nothing in the conduct of the case that calls for self-reproach on their part or justifies criticism of their course by others. It shows more prominently than many cases our limitations and is in this way humiliating, but this does not in any way detract from the services of those who did all that human wisdom and ability could do." A. E. B.

COPPER SULPHATE IN THE TREATMENT OF SOME DISEASES OF THE CONJUNCTIVA AND CORNEA.

An article in *The New York Medical Record* of July 7, by Dr. Claiborne, regarding the use of copper sulphate in the treatment of some diseases of the conjunctiva and cornea, demands, we believe, more than passing attention.

Dr. Claiborne not only advocates the use of copper sulphate in the treatment of a considerable number of chronic affections of the conjunctiva and cornea, but makes the broad statement that in the trachomatous inflammations, either with or without corneal com-

plications and unattended with marked secretion, there is no treatment to compare with the blue stone treatment.

While we are willing to admit that good results are produced by the blue stone treatment, we cannot accept the statement that it is either better than some other forms of treatment or that it is even as good. No man who has ever experienced the agonizing pain which accompanies an application of blue stone to the everted eyelids, or watched a patient suffering for hours from such an application, can doubt the assertion that the blue stone treatment of ocular affections is positively barbarous, and a physician inexcusable for adopting it as a regular line of treatment in the presence of other forms of treatment which have proven equally efficient.

There is nothing that blue stone treatment can accomplish that may not be done with infinitely less pain, and in much shorter time by other means. The application of blue stone is painful, and the pain is long and will not quiet, while in a large number of cases the treatment absolutely fails to accomplish what is expected of it. It is our firm belief that more eyes have been ruined by the indiscriminate use of blue stone than have ever been benefitted by such treatment, and the patients who have been subjected to treatment of this character have suffered more agony than is warranted in the treatment of any ocular affection with which we are acquainted and without securing any better results than could have been secured by other less painful and just as efficient treatment.

We confess to having employed the blue stone treatment in years since past, but have been lead through pity, if no other reason, to abandon the practice for other less painful and just as efficient means of treatment. We believe that every other physician who has the best interests as well as the comfort of his patient at heart, should forever discard blue stone as a remedy in the treatment of any ocular inflammation.

A. E. B.

HEALTH IN THE STATE OF INDIANA DURING AUGUST AND STATEMENTS IN REGARD TO THE DEATHS IN THAT MONTH.

Reports to the State Board of Health plainly show there was less sickness in August than in July, and the number of deaths was less by 230. The total number of deaths reported in July were 3,162 and the number reported for August 2,932. The annual

death rate per one thousand population in July was 14.8, and in August it was 13.7. Diarrhœal diseases were the most prevalent of all maladies during both July and August. The typhoid deaths in August rose to 137 as compared with 77 for the preceeding month. In August of 1900, there were 140 deaths from typhoid fever and we therefore note a difference of three in favor of August 1901. The deaths according to important ages were as follows: Under 1 year, 621; 1 to 5 inclusive, 343; 65 years and over, 621. For the preceeding month these diseases numbered respectfully 698, 307, 680. Pneumonia increased in August over July, the deaths from this cause being 63 and 53 respectfully. There was also a slight increase in diphtheria, the deaths from this cause in August being 16 and in July 14. In destruction of life, tuberculosis was second only to diarrhœal diseases. The total number of deaths from tuberculosis was 367. There was quite a decrease in deaths from cancer in August as compared with July, the figures being respectfully 69 and 112. The deaths from violence in July numbered 195 and in August 132. There was also a great difference in the number of deaths in public institutions during the two months, as in July 218 were reported and in August 96. The deaths in all the cities of the state numbered 1,150, which is an annual rate of 16. The rural deaths numbered 782, which is an annual rate of 12 1-2. As is usual in these reports, the rate for cities is found to exceed the rate for the whole state, and the rural rate is less than the state rate. In only one disease does the rural death rate exceed that of the cities and that disease is typhoid fever. It appears therefore, there is great necessity that farmers should learn to supply themselves with pure water and proper sewage disposal. Until this lesson is learned they must continue to suffer from typhoid fever. The cities, obviously, have also much to learn in the line of prevention. Diphtheria increased 5 per cent in August over July. In September we can confidently predict a further increase in this disease, for the schools open this month and those children who bear the malady in mild form and who are consequently less susceptible companions in the schools, and on pencils, slates, edges of drinking cups and other means transmission will occur. Medical school inspection would very greatly decrease the number of cases and deaths from communicable diseases. Medical inspection is simply making medical examination of all young children and denying admission to the schools of all those who are the least bit

below normal in health. Medical inspection would also lessen scarlet fever, whooping-cough, measles and other communicable diseases of children. There were 100 cases of smallpox during the month and no deaths. Following counties report it as present:

Adams county	20	cases
Daviess county	28	"
Porter county	3	"
Marion county	6	"
Randolph county	3	"
Dearborn county	4	"
Spencer county	12	"
Ohio county	6	"
Switzerland county	11	"
DeKalb county	7	"

100

Sec'y State Board of Health.

NEWS NOTES AND COMMENTS

FRACTURES ILLUSTRATED.—We have recently received the fifth of the series of illustrated fractures which are being published by Battle & Company, of St. Louis. The one before us is the fracture of the fibula, and is known as "Pott's Fracture." These illustrations are a work of art and are worthy of preservation by every physician.

A NEW MEDICAL JOURNAL.—We have just received the first number of *The Oklahoma Medical News*, published at Oklahoma City, Oklahoma. The new journal starts out with thirty-two pages of reading matter, divided between original articles, editorials, personals and abstracts. The periodical will appear monthly, and is devoted entirely to medical science.

NOTICE OF REMOVAL OF THE RIO CHEMICAL Co.—Owing to the remarkable growth in their business, and a desire to be where there are better facilities for procuring the various ingredients that enter into the composition of the various preparations made by the firm, the Rio Chemical Co., formerly of St. Louis, announce that they

have moved their plant to New York City, with office address at 56 Thomas street.

DR. PORTER HONORED.—At the recent meeting of the American Association of Obstetricians and Gynecologists, held in Cleveland, Ohio, Dr. Miles F. Porter, of Fort Wayne, was elected vice-president. The association has a large membership and nearly all the prominent obstetricians and gynecologists of the country are identified with it.

A GREAT SYMPTOMATOLOGIST.—Henpeck: That new doctor you introduced me to, Bowler, is a great symptomatologist—great student of human nature.

Bowler: Suit you, does he?

Henpeck: Thoroughly. Had him last night to treat my wife for a cold, and he said she didn't need any medicine, but that she must be particular, above all things, to keep her mouth shut and breath through her nose.—*Oklahoma Medical Journal*.

AMERICAN MEDICAL ASSOCIATION INDUCEMENTS.—The officers of the American Medical Association are now soliciting new members and are offering to send *The Journal of the American Medical Association* from now until the first of the year gratuitously to every new member, the five dollars annual dues being applied to the dues and subscription to the *Journal* for the year 1902. To every member of the A. M. A. who secures a new member there will be sent an official gold A. M.A. button, the insignia of the association.

INVESTIGATION OF SPIRITUALISM.—Dr. H. V. Sweringen, of Fort Wayne, has addressed a letter to the president and officers of the University of Pennsylvania, with reference to the Seybert bequest of \$60,000 for the purpose of investigating the subject of spiritualism, and making inquiry as to whether the entire amount has been expended by the committee appointed to investigate the subject. Believing that the entire amount could not have been expended by the committee appointed to make the investigation, such committee having already made its report and been discharged, Dr. Sweringen inquires if it would not be proper to appoint another committee for another and more careful investigation of the claims of modern spiritualism.

INEFFICIENCY OF THE INTERNAL ADMINISTRATION OF PETROLEUM EMULSIONS.—In an editorial in the *St. Louis Courier of Medicine*, attention is called to the fact that medical men are too apt to leap beyond the facts of established science, and as an example, mention is made of the habit of some medical men to prescribe for internal administration certain substances the osmotic pressure of which is so low that it is exceedingly unlikely that they are absorbed. Such are the petroleum emulsions which are recommended for a great variety of diseases. These hydro-carbons are not tissue fats, and it is to be expected that the intestinal fluids and the absorptive power of the villi cannot cope with them.

FORT WAYNE PHYSICIANS AGAINST "DIVISION OF FEES."—The Allen County Medical Society, which has on its membership roll nearly every one of the regular practitioners of the city of Fort Wayne, recently unanimously passed the following resolutions with reference to "division of fees:"

"Resolved, That the offering or the giving of a commission or percentage of a fee by a consulting physician or operating surgeon, or the asking or receiving of such a fee or commission in any guise whatsoever by the physician referring the case, is dishonest, disreputable and unethical, unless such arrangement be made with the full knowledge of the patient.

"Resolved, That a violation of this resolution shall subject the offender to expulsion from the Society."

THE INCOMES OF PHYSICIANS IN BERLIN.—For the support of the Medical Chamber of Berlin, including the province of Brandenburg, and also for the support of the needy members of the profession in that district, a tax is levied upon the profession at a rate of \$2.50 each annually, with an additional sum upon those earning more than \$1,250 annually, according to the *London Lancet*. Of 1,946 medical men in Berlin under the jurisdiction of the Chamber, it was found that 529 earned from \$225 to \$750 annually, 273 from \$750 to \$1,250, and 785 more than \$1,250; the largest income amounting to \$73,750; 107 were found to have no taxable income whatever, and that of 250 could not be ascertained. In the other towns of the province 4 per cent of all the physicians had no taxable income, 26 per cent from \$225 to \$750, 17 per cent from \$750 to \$1,250, and 40 per cent more than \$1,250. Possibly there is a sudden atrophy of their incomes when the returns are to be given to the assessor.—*Courier of Medical Science*.

THE SOCIETY OF ORIFICIAL SURGEONS.—We have before us the program of the 14th annual session of the American Association of Orifical Surgeons, which was held at the Chicago Homeopathic Medical College in Chicago on September 18th and 19th. The titles of the papers indicate that the essayists are not united in their ideas regarding the value of orifical surgery. The enthusiasts, however, report cures of everything from Pott's disease of the spine to insanity by orifical methods of treatment. The surprising thing is that at a meeting devoted to a consideration of orifical methods, and attended almost wholly by renegade homeopaths, there should appear one or two well-known surgeons of the regular medical profession who presented papers not in conflict with the theories advanced by the orificalists. The explanation is simple, and is summed up in the desire to secure business, even at a sacrifice of professional integrity. No doubt these surgeons will be considered by the orificalists as one of their kind, and the regular medical profession will be asked to also consider them ethical and upright physicians of the regular profession.

MOSQUITOES CURE A RATTLESNAKE BITE.—In connection with the general crusade against mosquitoes which now prevails as a result of the investigations which determined that mosquitoes are the carriers of contagion, it may be interesting to note that the mosquito occasionally proves of some benefit, as evidenced by the following condensed report taken from one of the daily newspapers which we give for what it is worth: A farm hand in a region infested by both mosquitoes and rattlesnakes was severely, and supposedly fatally bitten by a rattlesnake. Immediately after the injury, large numbers of mosquitoes which were in the immediate vicinity began alighting upon the wound and plying their usual vocation of filling themselves with blood. It was soon found, however, that the mosquitoes, one by one, dropped over dead as the result of partaking of the rattlesnake venom with which the wound was infected. The newspaper report goes on to say that the man recovered, and that he attributes his remarkable recovery to the fact that the mosquitoes withdrew the rattlesnake venom and suffered death that he might live.

NICHOLAS SENN PRIZE MEDAL.—The committee on the Senn

Medal beg to call attention to the following conditions governing the competition for this medal for 1902:

1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who shall present the best essay upon some surgical subject.

2. This medal will be known as the Nicholas Senn Prize Medal.

3. The award will be made under the following conditions:

a. The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened and the name of the successful author announced. *b.* All successful essays become the property of the Association. *c.* The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the Association. *d.* The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association. *e.* The competition for the medal will be closed three months before the next annual meeting of the American Medical Association, and no essays will be received after March 1, 1902.

Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th street, Philadelphia, Pa.; Dr. Charles H. Mayo, Rochester, Minn.

NURSES GRADUATE.—The annual commencement exercises of the Hope Hospital training school for nurses was held at the Masonic Temple on Thursday, October 3, 1901, a class of eleven young ladies being graduated.

The nurses appeared in their plain but neat and attractive working costumes. The stage was artistically decorated with bunting, in the class colors—blue and white, and potted plants. The Haydn, Apollo and Linden quartets sang two numbers together and the Haydn quartet alone sang one and responded to an encore with "Robin Adair." Mrs. Sam Moffat sang two solos, and Miss Hattersley one. The rest of the music was furnished by Reineke's orchestra. Were all our readers natives of

Fort Wayne it would be unnecessary to say that the audience had the pleasure of enjoying a rare musical treat. That they appreciated it to the full extent was evidenced by the warmth and number of the encores.

The oath, which is a modification of the Hippocratic oath, was administered by Dr. W. O. Gross and the badges distributed by him. Mr. Samuel Foster presented the diplomas. Hon. Charles Worden delivered an address full of wisdom and sparkling with humor. Dr. K. K. Wheelock delivered the valedictory which was sound morally, high toned from a professional standpoint, replete with sentiment, and clothed in a garb of diction which none would care to criticize. The floral gifts were many and beautiful.

The class of nurses graduated is the largest since the training school of Hope Hospital was opened, four years ago. The school is under the competent and pains-taking guidance of E. Gertrude Fournier. On the evening preceding the graduating exercises, the nurses were given a banquet by a large number of physicians of Fort Wayne, and following the graduation exercises the graduates were given a reception at the residence of Samuel M. Foster.

The graduated class of 1901 is as follows: Misses Ella Amelia Jones, Lena May Weaver, Clara Elizabeth Collins, Rose Lulu Barnhard, Bessie Irwin Parker, Alice May McCully, Dora Shumaker, Elizabeth Dorethea Rehorst, Addie Gertrude Dustman, Agnes Maud Jones, Jessie Cameron.

On the whole the graduating class and their friends are to be congratulated upon the success of the function. Certainly the writer never attended a commencement more thoroughly enjoyable than this. I am glad to be able to say this in truth, for successful commencements add not a little to the good repute of educational institutions. This school and hospital has already won for itself an enviable reputation, and with a continuation of such work as it has done in the past its future success is assured. The hospital is, however, too small to accommodate all who apply for rooms, and before it can be enlarged more money is needed. This must come from donations, for public hospitals don't pay. Will not some philanthropist with more of this world's goods than the necessities of life demand make a donation to this institution which will enable it to extend a beneficent hand to the many who are now asking its aid but who must be denied for want of room? P.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

ON ESSENTIAL OR TOXAEMIC DROPSY; DROPSY WITHOUT ALBUMINURIA.—*Brit. Med. Jour.*, 9-7-'01.—Cases of general anasarca are occasionally met with, chiefly in children but sometimes also in adults, which exactly resembles cases of Bright's disease, but in which there is no albumin discovered in the urine, and no abnormal condition of the heart to account for the dropsy. These have been called cases of essential or idiopathic dropsy. Herringham believes that it is not the loss of blood cells in anaemia nor the failure of excretion in nephritis that produces this toxic condition, but that there is some original toxic poison, such as that of scarlet fever, which produces not only the nephritis or the anaemia, but also the edema, the latter being coincident with, but not consequent upon the inflammation of the kidneys, or the loss of blood cells. Scarlet fever is certainly a toxic disease, and it is possible that a chill is also due to micro-organismal invasion. It is then reasonable to suppose that in certain cases the toxæmic conditions may produce dropsy without inflaming the kidney.—*Phil. Med. Jour.*

GRANULAR DEGENERATION OF THE ERYTHROCYTE.—White and Pepper writing of granular degeneration of the erythrocyte, a condition in which the erythrocyte presents fine or coarse granules that have an affinity for basic stains, conclude: (1) The granules are a constant finding in cases of lead poisoning and appear very early in cases under the influence of lead salts long before subjective or other objective symptoms can be demonstrated. (2) The granu-

les disappear in cases of chronic lead poisoning as the convalescence is established. (3) Apparently lead does not produce an immunity, as one of the patients worked for 24 years, another for 20 years, without having pronounced symptoms of lead poisoning, and in both of these cases the granules were present in moderate numbers. (4) The granules may be produced experimentally in dogs, appearing in a very few days after the beginning of the experiment, and increasing as the intoxication becomes severe. (5) The granules in experimental cases are rather fine, and show a tendency to clump at first; later all varieties appear. (6) The granules are a true degeneration of the erythrocyte and have no relation to nuclear fragmentation or to polychromatophilia.—*American Medicines. Am. Journ. Med. Sciences.*

MELANCHOLIA IS A DISEASE OF DISORDERED METABOLISM.—Bruce and Alexander believe that melancholia is a disease of disordered metabolism and that treatment should be directed toward increasing the excretion of waste products of this metabolism through the channels of the urinary and integumentary systems, which they accomplish mechanically by administering to their patients an abundant fluid dietary. By means of this treatment the blood gets rid of its overcharge of waste products and the arterial tension falls. They assist digestion by giving milk frequently, and in small quantities, as it is the most easily assimilated food. They consider the forcing of solid food (or such food as custards) upon a patient suffering from acute melancholia just as injudicious treatment as would be the feeding of a patient suffering from typhoid fever exclusively on beef-steaks. They append four charts illustrative of their cases, with a short summary of each case. Each chart shows the temperature, pulse, arterial tension, and the amount of sleep obtained each day. The amount of urea excreted on certain days during the 24 hours is also shown diagrammatically. A small additional table illustrates the fact that while the patients were on the fluid diet their loss of weight was immaterial.—*London Lancet-American Medicine.*

SWEAT BATHS, ETC.—Friedlander has experimented on himself and others with various forms of sweat baths, and baths that increase bodily temperature, such as the Russian steam bath, and gives

the indications for either variety as follows: He prefers temperature increasing baths. 1. In combating infectious and toxic conditions. In acute and subacute diseases due to exposure, catarrh of the upper respiratory passages, fresh rheumatic affections of the muscles and joints, and also in other infections, the onset of which is not characterized by high fever and in which individual conditions render an increase of the fever permissible and desirable for the course of the pathological process. Furthermore in syphilis, and in a general gonorrheal infection. 2. When an intense increase of metabolism is indicated from other causes, such as autointoxication, and in conditions affecting metabolism, like gout.

On the other hand he favors sweat bath: 1. When a cure by means of free diaphoresis is contemplated, in exudations and transudations, in nephritis with oedema, in hydremia and chlorosis, in metallic poisoning and in obesity as an adjunct to other methods of treatment. 2. When chronic inflammatory process are to be influenced by peripheral hyperemia. In chronic and especially rheumatic affections of the muscles, joints and nerves, in the residual conditions of acute arthritis deformans, in neuritis, and in tubercular arthritic affections.--*Jour. A. M. A.—Phil. Med. Jour.* 8-31-'01.

HEMATURIA FOLLOWING THE ADMINISTRATION OF UROTROPIN.
—As all drugs possessing great value must possess power for good and evil it is interesting to read of the following case described by Brown in the *British Medical Journal* of June 15, 1901. He begins by reminding us that the use of urotropin in enteric fever has been advocated of late by several authorities. Horton-Smith urges the administration of thirty grains daily in all cases throughout the whole course of the fever and during the first three weeks of convalescence, as first suggested by Richardson. In this way he considers it may be possible to prevent urinary complications in the patient, and also the spread of infection to others through urine. He adds that, taken in such doses and during such a prolonged period, the drug produces no ill effect beyond some urethral pain occasionally if the urine be allowed to become concentrated. Neufeld makes a similar plea, saying that urotropin is almost invariably well borne. Suter states that doses of from 15 to 25 grains a day can be given for weeks in succession. Mogli certainly reports a burning and appearance of red blood corpuscles in the urine follow-

ing the use of the drug in cases of cystitis of gonorrheal origin; but he employed much larger doses than those recommended above, giving 6 grammes (or 92.6 grains) a day. The drug, though of undoubted value, is not quite so free from injurious effects as has been taught.

The occurrence of hematuria in two cases of Dr. Brown admitted on successive days after urotropin had been given for eight days, and its rapid subsidence after the drug was stopped, is too striking to be a mere coincidence. Hematuria resulting from nephritis in enteric fever is not unknown, but in such cases urotropin appears to be beneficial. In the cases reported by Dr. Brown the bladder seems to have been the source of hemorrhage.

This untoward effect of urotropin cannot be common. Out of eighty-two cases of enteric fever treated at the Metropolitan Hospital during the last winter urotropin was given in thirteen. In one of these hematuria occurred, but the patient was taking turpentine at the same time.

Discomfort, which preceded the hematuria in both cases, should be considered a danger-signal when employing urotropin, in the opinion of Dr. Brown.—*The Therapeutic Gazette*, Sept., 1901.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

VULVAR PRURITIS.—Sieburg, of Barmen, has been very successful in the relief of vulvar pruritis with local subcutaneous injections of 300 c. c. of a very weak solution of cocain or phenic acid. The quantity of the fluid rather than its nature is important. The injection lifts the skin and thus stretches the nerve terminals. The relief following the injection frequently lasts a week. Other treatment may be kept up at the same time.

ANESTHETISTS.—In the course of an article on anesthesia in the *Am. Jour. Med. Sci.*, by Finney, of Johns Hopkins, occurs the

following which I think important enough to warrant reproduction by every medical journal published:

"I cannot emphasize too strongly my conviction that in severe operations the anesthetist plays a most important, and in some cases a more important role than the operator, and one of the reforms most urgently needed in the medical profession of our country to-day is a thoroughly competent corps of anesthetists in our hospitals and in our medical schools, and a thorough and complete course of instruction in the proper methods of administration and use of these agents so powerful for good when rightfully used, and so useful for relief in suffering humanity and yet capable of producing such disastrous results.

PERFORATING TYPHOID ULCER—OPERATION—RECOVERY.—Dr. William Jones, of Portland, Oregon, reports a case (*Annals of Surgery*, July) of perforating typhoid ulcer which recovered after operation. The patient, a young woman, had been sick a month and was taken suddenly with severe pain while voiding urine. An hour later she had a chill. Four and a half hours after the onset of pain she was perspiring profusely, her pulse was 140 and temperature 103 degrees. There was great pain and tenderness over whole abdomen. Sixteen hours after the first symptom of the perforation the abdomen was opened, although the case seemed almost hopeless. The perforation was not discovered, but owing to the grave condition of the patient, it was considered wiser to treat the case as one of general peritonitis. Accordingly, after irrigation, the cavity was drained by combined tubular and gauze drains. A fecal fistula followed which closed spontaneously. The recovery was slow but complete.

PORO-CAESAREAN SECTION FOR PLACENTA PREVIA.—Gillette, of Toledo, (*Boston Med. Surg. Jour.*, July), reports a case of placenta previa in which he resorted to the above operation with a successful issue. The hemorrhage was severe and the os only slightly dilated. He feared that an attempt to dilate sufficiently to deliver would result in fatal hemorrhage.

Zinke read a paper before the recent meeting of the American Association of Obstetricians and Gynaecologists advocating the Poro-Caesarean, Caesarean or Poro operation in certain cases of placenta previa.

That it should be the treatment instituted in all cases no one contends, but that it is the best treatment in many cases can not, we think, be successfully controverted. That it requires as much judgment and surgical skill to dilate the os, perforate the placenta, bring down a foot and deliver, as it does to do a Poro or Poro-Caesarean operation is, perhaps, not generally conceded, but we believe it to be true. With an undilated and rigid os, accompanied by severe hemorrhage in a woman already weak from loss of blood, either a Poro, a Caesarean, or a Poro-Caesarean operation offers the patient a better chance than does any other method of delivery. The Poro operation should be done also in cases of placenta previa with contracted pelvis.

EPILEPSY.—Dr. Wm. P. Sprathing, the superintendent of Craig Colony for Epileptics, says (*Buffalo Med. Jour.*) concerning the treatment of epilepsy:

"I believe that much of the surgical work done for the relief of epilepsy should not be done. In some cases the operation is put off until the disease has become so thoroughly established that it is not removable by any means, and least of all can it be excised with the knife. Again, I have seen many trephinations done in cases in which the epilepsy was unquestionably inherited. I believe the great principle of *non-nocere* should be made to apply in these cases. Before we do any sort of an operation for the relief of epilepsy, we ought to study the case closely from every side, taking into account hereditary factors, if any; the character, frequency and duration of the seizures, and especially should we consider the mental condition of the patient at the time; for if this has been impaired, I question whether an operation is ever justifiable as a means of cure; but I do not say it should not be done as a palliative measure."

In the discussion which followed the paper Dr. L. P. Clark, in speaking of injuries during birth as causes of epilepsy, said that after going over the statistics of several thousand epileptics he was of the opinion that prolonged labor was a ten times more fruitful cause of epilepsy than was instrumental delivery. He regards prolonged labor as one of the most important etiologic factors in epilepsy. He also alluded to the fact that Freud, Gowers, and Wollenberg had recently called attention to this fact and advised early skilled attention in cases of difficult labor to prevent the child from

suffering the evils attendant upon prolonged labor. Dr. L. A. Wrigel in the course of his remarks said:

"Some years ago Dr. Little, of London, wrote rather a classical paper on the nerve phenomena that follow those conditions, premature labor, prolonged labor, instrumental delivery and asphyxia, and in all of the cases, if I remember rightly, has given the history of either one of those conditions. Dr. Little ascribed the damage to the brain, to capillary hemorrhage, which later on produced the destructive changes in the brain tissue."

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

NEW METHOD FOR DISCISSION OF SOFT CATARACT.—Dr. Percy, Dunn, in *The London Lancet*, advises that in needling a soft cataract the aqueous be drained away before the needle is withdrawn, thus avoiding a tendency to increased tension. The argument made is that with a lowered tension there is a more rapid circulation of fluids through the eye which causes the soft lens matter to absorb with more rapidity.

CAN NASAL CATARRH AND CATARRHAL DEAFNESS BE CURED.—Dr. C. M. Cobb, in the *Medical Record* of September 7th, says that a question asked nearly every day of those engaged in directing their attention to the diseases of the nose and throat, is whether nasal catarrh and catarrhal deafness are curable. The question is answered by saying that the so-called catarrhal diseases of the upper respiratory tract, with all their attendant complications, are curable, and that while many of the cases will require much time and observation, the results obtained will amply repay one. The argument is made, however, that the source of discharges in post-nasal catarrh, the one most affecting the hearing, is the same as a chronic

discharge in other parts of the body, i. e., that it is the overflow of an infected and inflamed cavity, the drainage of which is interfered with to such an extent that it does not heal, or that there may be diseased tissue within the cavity which prevents spontaneous healing. It is necessary to examine each case in regard to the history, the course, and the present condition of the nose, throat, ears and teeth.

Dr Cobb takes the stand that chronic catarrhal inflammation of the naso-pharynx, with the exception of those cases which may be caused by a local syphilitic or tuberculous lesion, or by adenoids, is a secondary disease caused by a collection of fluid in some one or more of the nasal accessory sinuses, and that a chronic discharge in the nasopharynx differs in no way from a chronic discharge in other parts of the body, and that it should be treated in the same way, i. e., by improving the drainage of the cavity from which it flows.

It is now a recognized fact that diseases of the sinuses, instead of being rare conditions, are among the commonest that are found upon post-mortem examination. It certainly would not be unreasonable to assume that these unrecognized cases of nasal empyema are the cause of an incurable catarrhal disease. We cannot reasonably expect a discharge from a nasal empyema to cease under treatment, so long as the true condition is unrecognized, and the fact that over 90 per cent of the diseases of the accessory sinuses are unrecognized during life explains the failure to cure post-nasal catarrh and catarrhal deafness.

Any satisfactory treatment of the so-called catarrhal diseases of the nose and throat must be based upon a thorough knowledge of the anatomy and physiology of the nose and throat, and of the sinuses which drain into them, upon a knowledge of the principles of general surgery, and lastly upon a painstaking study of each individual case.

THE THERAPEUTIC VALUE OF ADRENALIN CHLORID.—Dr. Dudley S. Reynolds, in a paper read before the Western Ophthalmologic and Otolaryngologic Association, summarizes an article upon the use of adrenalin chlorid with the following:

1. It is a powerful hemostatic, and acts promptly, generally within one minute from the time it is applied locally to mucous surfaces.
2. Its effects persist from 20 minutes to 4 hours.

3. It promptly relieves ciliary pain in all forms of keratitis, iritis, and even the cyclitis of glaucoma.

4. It reduces ocular tension in glaucoma, and apparently prevents hemorrhage in iridectomy.

5. It promptly clears up interstitial opacities of the cornea, following contusions, and seems to modify favorably the opacities of punctate keratitis in cases of syphilitic iritis.

6. It will, in many cases, so reduce the swelling in the tear passage as to allow a stream of fluid to pass from Anel's syringe through the duct, without the use of a probe. In an old purulent dacryocystitis, the pus being pressed out with the finger through the tear sac, about 2 minims of adrenalin was passed in with the Anel syringe. Five minutes later, a charge of sodium chlorid solution passed readily through the duct into the nose. Repeating this procedure daily, prompt recovery was secured without the introduction of the probe. In a great variety of tinnitus aurium, prompt and sometimes lasting benefit follows the introduction of a drop of adrenalin solution through the eustachian catheter, blown into the tympanic cavity. A number of cases of tinnitus without serious impairment of hearing, have been permanently relieved by 2 or 3 applications of the adrenalin through the catheter.

7. In all forms of swelling in the lining of the nose, prompt relief follows the application of 4 or 5 minims of the adrenalin solution sprayed into the passage. In this way the superior crypts may readily be opened and medicated fluids sprayed into the passage, or other applications made, where access is otherwise impossible.

It renders operations in the nasal passage, and elsewhere, nearly or quite bloodless, and does not, as some claim, predispose to secondary hemorrhage, but has a contrary effect. The 1 to 1,000 solution of adrenalin in sodium chlorid may be relied upon to relieve any case of epistaxis.

In cases of secondary hemorrhage, after operations in the nasal cavities, or tonsils, an application of adrenalin solution on a cotton mop, pressed upon the bleeding surface, proves promptly efficient as a hemostatic.

The adrenalin solutions are, in every sense of the word, superior to any preparation of the suprarenal extract, or of the dessicated glands, which I have been able to procure, and I think the world is deeply indebted to Takamine for his discovery.—*Amer. Medicine.*

BOOK REVIEWS.

PROGRESSIVE MEDICINE.—A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical college of Philadelphia; Physician to the Jefferson Medical College hospital. Assisted by H. R. M. Landis, M. D., assistant physician to the Out-Patient Medical department of the Jefferson Medical college hospital. Volume II. June, 1901. Surgery of the Abdomen, including Hernia, Gynecology, Diseases of the Blood, Diseases of the Glandular and Lymphatic System, Metabolic Diseases, Ophthalmology. Lea Brothers & Co., Philadelphia and New York. 1901.

This well known serial publication continues to maintain the high standard which has characterized it from its inception. The present volume is both medical and surgical in its scope, and includes a very elaborate report on the progress of the surgery of the abdomen, including hernia by Dr. Wm. B. Coley, which is remarkably rich in fine illustrations of the subject with which it deals. The chapter on surgery of the stomach is especially timely in view of the importance of early operation in cases of gastric cancer. Every suspicious case should have the benefit of a most exhaustive application of available diagnostic procedures by a specialist in stomach diseases, and a surgeon called into the case at once if a probable diagnosis of cancer can be made with a view to immediate operation, which holds out the only hope of material benefit.

The chapter on gynecology by Dr. John G. Clark gives an excellent resume of advances in this department. Among the points of special interest may be mentioned a discussion of parasitic origin of malignant growths, and if one is especially optimistic in his temperament, he may glean considerable comfort from the positive prediction "that the remedy will be found, sooner or later, which will be radically curative." The discussion on spinal anesthesia is also interesting, and I believe the writer gives good advice when he says,

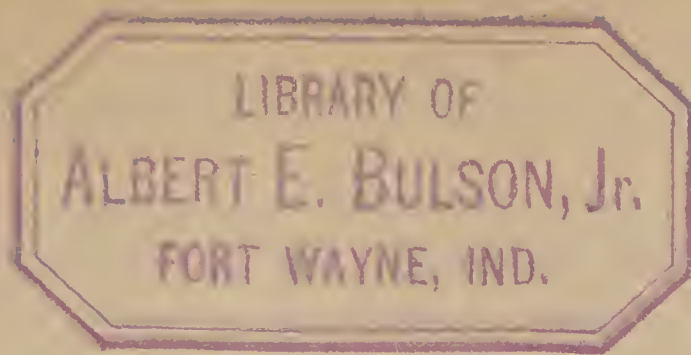
"As with all new measures, therefore, I feel that those who desire to be upon the safe side should hesitate to employ spinal cocainization until its field of usefulness, its dangers, and its post-operative results are definitely defined."

To the general physician the chapter on diseases of the blood will appeal with special force. Much of practical interest will be found in this section. The greater importance of the etiology of blood diseases lends interest to any discussion of this question. Both prophylaxis and active therapeutic treatment must find their rational basis here. The gastro-intestinal origin of pernicious anaemia is discussed at length with many interesting data bearing upon these questions, showing an undoubted relationship in many cases.

The volume closes with an interesting chapter on ophthalmology by Dr. Edward Jackson which is of special interest to the practitioner in this department, although the general clinician will not search in vain for many points of interest; for instance, toxic amblyopia from excessive tea drinking, Jamaica ginger, and san-tonin may be mentioned in this connection. The production of glaucoma by mydriasis, which is discussed at some length is also something which should be well known by every physician.

Altogether this volume is one of exceptional merit, and should find a place in the library of every physician who desires to keep thoroughly abreast of the times.

G. W. McC.



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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

IS IT ADVISABLE TO AWAIT REACTION FROM SHOCK IN SEVERE INJURIES BEFORE OPERATING?*

By MILES F. PORTER, A. M., M. D.
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Professor of Surgery, Clinical Surgery and Gynecology in the Fort Wayne College of Medicine.

At our meeting in 1899 I read a paper in which I advocated intravenous saline injections and immediate operation in certain severe injuries. Since that time further experience, reading, and thought, have confirmed the views then expressed and led me to think that the more general adoption of them would result in the saving of life. It will be remembered that this line of treatment is not urged in minor injuries unaccompanied by severe hemorrhage nor in severe injuries without blood-loss and wherein the shock is of the purely nervous variety. I believe, however, that even in these cases immediate operation will yield as good if not better results than we get with the old and generally accepted plan of treatment. Transfusion is of course unnecessary where there is no loss of blood.

*Read at the meeting of the Wabash R. R. Surgeons at St. Louis, Nov. 14, 1901.

I believe the importance of the nervous element in shock has been, and still is, much overrated. While I would not deny the existence of nervous shock, I believe it to occur only as a result of injuries received by persons in possession of their mental faculties. In an experience covering hundreds of the more severe major operations in surgery done under surgical anesthesia I can not recall a single case of shock, of sufficient degree to attract attention or call for treatment, that occurred in the absence of considerable blood-loss. That is to say that shock and hemorrhage as applied to conditions following injuries, received during unconsciousness, are in my opinion practically if not entirely synonymous. Certain injuries to the nerve centers, of course, excepted—as for instance injuries of the solar plexus.

If the reasoning thus far be correct then the logical conclusion is that we as surgeons in dealing with shock are dealing with conditions dependent upon loss of blood and the effect of injury as manifested through the mind.

How does the theory tally with the facts obtained through practical observation? Is it not a matter of common observation that other things being equal the pulse grows better and that the other symptoms of shock subside in a measure under anesthesia? It may be said that railroad injuries frequently are contused and lacerated wounds and therefore do not bleed. This is true in a measure only and not in sufficient measure to allow us to displace hemorrhage from the important position which it holds as a factor in shock.

Other things being equal the effects of loss of blood depend in no small degree upon the suddenness of the loss. A given quantity of blood suddenly withdrawn from the circulation produces syncope, the same amount withdrawn in the course of an hour produces no subjective symptoms whatever and no marked objective symptoms.

A man is run over by a train and sustains a crush of both legs, or a crush of one thigh. That man has suddenly lost enough blood to produce pronounced symptoms of shock to say nothing of the effects of pain and horror. 'Tis true the blood has not been poured out on the ground perhaps, but it has been withdrawn from the circulation which is in effect the same thing.

Again, I believe the amount of bleeding after crushing injuries is usually under-estimated. Let those who doubt this ob-

serve the swelling that occurs in a crushed member before sufficient time has elapsed for the production of gases or the manifestation of signs of inflammation. All of this swelling is due to hemorrhage.

It may be asked why it would not be as well to control the hemorrhage by the tourniquet, transfuse and wait until reaction comes on before operating. The reply is that this means a prolongation of the suffering both physical and mental and a very decided addition to the risk of infection. As illustrating and emphasizing these points I may refer to a case, seen with Dr. C. B. Stemen, of crushing of the four extremities. It was thought the man would die unless we waited for reaction. Therefore elastic tourniquets were applied and we waited. Contrary to our expectations partial reaction did come on. The four amputations were simultaneously done with intravenous transfusion. The man was put to bed in better shape than when he was put on the table, only to die at the end of seventy-two hours from septic infection. The amputations were made twenty-two hours after the receipt of the injury and the mangled tissues emitted a decided odor of putrefaction.

In conclusion let me say that anesthesia is the best remedy known with which to combat the nervous element in shock; that direct intravenous transfusion of normal saline solution is the best remedy in hemorrhage; that delay in operating increases the danger from sepsis. Therefore let us be governed by reason rather than by rule in these cases and operate at once and transfuse under anesthesia rather than wait and waste time that is precious to our patients, by adhering to traditional teaching through fear of the fetish of authority.

47 West Wayne St.

A REPORT OF FOUR CASES OF FAT NECROSIS IN CONNECTION WITH GALL STONES.*

By W. A. EVANS, M. D., Chicago.

Fat necrosis is probably more frequent than we think. It is quite probable that gall stones are a prominent etiologic factor. The case reported by Drs. Opie and Halstead would confirm this

*Author's abstract of an address upon fat necrosis, with report of cases, presented before the Allen County Medical Society at Fort Wayne, Tuesday evening, October 29th 1901.

view. It is quite possible that in cases of gall stones fat necrosis is overlooked at the time of operation or at the autopsy. In a case such as the Cook County Hospital case such overlooking would be more than probable. In the Roehr-O'Byrne case such a contingency would have been less probable. In the Wells-Lewis-Davis case it might have been overlooked. The same is true of the Beck case.

HISTORY OF THE CASES.—That of Drs. Davis, Lewis and Wells.—There had been repeated attacks of gall stones quite like this one. This attack was followed by symptoms of local peritonitis around the gall bladder. There was a great sense of uneasiness in the upper segment of the abdomen. There was no fever. The pulse was 80 to 100. The gall bladder was full of gall stones. There were none in the ducts. Autopsy showed extensive distribution of small nodules of fat necrosis.

Case of Drs. Roehr and O'Byrne.—A large, heavy man had been having recurring attacks of gall stone colic for three years. This attack came on in same way. It persisted, so a diagnosis of stones with infection of gall bladder was made. There was great abdominal discomfort. Much general unrest and much general cyanosis. The operation showed the fat necrosis. After the operation the temperature was excessive, the pulse rapid, and the lividity extreme. There was a rather peculiar delirium. Autopsy showed a most extensive necrosis and hemorrhage pancreatitis. The necrosis involved the preperitoneal and perirenal fat as well as that of the omentum and mesentery. There were gall stones in the bladder but none in the ducts.

Cook County Hospital Case.—The history was that of an obstructive biliary cirrhosis. The patient was under observation about a day. The history sheet did not indicate gall stones. He said that he had had three such attacks in the last five years. The autopsy showed obstructive biliary cirrhosis and a limited amount of hemorrhagic pancreatitis and fat necrosis in and right adjacent to the pancreas. The gall bladder was very full of stones. There were none in the ducts.

Case of Drs. Beck.—There had been many previous attacks. In some of these there was jaundice, in most of them there was none. She passed gall stones in the early part of this attack. There was a little fever. The patient suffered a great deal of pain in various parts of the abdomen, this being sometimes on one side and some-

times on the other. There was great cyanosis. The patient was operated. Stones were removed from the gall bladder—none were found in the ducts. The patient recovered very satisfactorily.

In all of these cases there were stones in the gall bladder but none in the ducts. In each autopsy the liver, pancreas, stomach and duodenum were removed en masse and the ducts were explored under the best of circumstances.

ANATOMY OF THE PANCREATIC AND BILIARY DUCTS.—The common duct is so much larger than the cystic duct that small stones do not halt after getting out of cystic duct. As a further consideration, the cystic duct is richer in transverse folds.

The common bile duct and the pancreatic duct run in very close proximity for two inches. In this distance they traverse the duodenal walls very obliquely. They fuse in the submucosa and open by a common opening. In Schirmer's study of 105 subjects, 56 had a secondary pancreatic duct emptying into the duodenum about two inches above the main duct. A gall stone might lodge in the fused duct and the bile would run up the pancreatic duct into the pancreas. From the pancreas it might flow into the duodenum through an accessory duct. If the stone was in the common bile duct it might obstruct the pancreatic duct by pressure. I have made an autopsy on a man who had bile staining of the pancreatic ducts due to no other known cause but excessive and continued vomiting. It seems that something beside the mere presence of pancreatic fluid is necessary. Chiari is of this opinion. I think that an analysis of the work of Flexner, Opie, Fitz, Katz, and Winkler shows the same thing.

There are probably two entirely different and sometimes dissociated processes—fat splitting by steapsin and proteid digestion by trypsin. Chiari, Blume and Flexner are of this opinion. The distribution of the lesions in these cases and in other cases in the literature would suggest that the fat splitting ferment is spread along the peritoneal surfaces, that it enters the lymphatic openings and travels along the lymphatics for a short ways. It probably cannot diffuse any great distance by either lymph or blood ways.

DIAGNOSIS.—Temperature. It is probable that temperature will not be of much service. There is more temperature than is to be expected in the first ten days after gall stone colic, but this may be due to infection of the gall bladder.

Pulse.—The pulse is usually a little too rapid for the temperature, but this is not very reliable.

Pain.—The pain is a prominent feature. It is peculiar in character. It is frequently shifting.

Fluid in the peritoneum.—This will probably never be of much service in diagnosis.

Nervous unrest.—This is a most valuable symptom. It was noted by Halstead and Opie, and by Drs. Roehr, O'Byrne, Wells and Beck.

Cyanosis.—This is a valuable symptom. It was noted by Halstead and Opie and by Drs. Roehr, O'Byrne, Wells and Beck.

Diagnosis is to be made especially between gall stones with necrosis and gall stones without it, and between gall stones with fat necrosis and acute intestinal obstruction.

OIL OF CASSIA FOR MOSQUITOES.—A correspondent of *American Medicine* advises the use of Oil of Cassia as an irritant poison to mosquitoes. Its power remains for a long time after it has dried, and its odor while antagonistic to mosquitoes is not unpleasantly offensive to human beings.

A BILL FOR PROFESSIONAL SERVICES.—A Pittsburg physician has put in a bill of \$5,240 against the estate of a deceased millionaire for professional services during a period of five months. His charges were \$25 each for visits at his patient's residence, and \$100 a day for accompanying him on a three weeks' visit to Atlantic City.

OPPOSITION TO WOMEN MEDICAL STUDENTS IN GERMANY.—The professors of anatomy, chemistry, and physics at the University of Königsberg have excluded women students from their lectures, with the result that women cannot study medicine regularly at that institution.—*Medical Record*.

AN INDIANA CONSUMPTION CURE.—A new consumption cure is announced from Evansville, Ind. The treatment, devised by Dr. Peckinpugh, of Mount Vernon, Ind., consists in the inhalation of smoke from the burning of various kinds of leaves, the fumes of which are believed to possess marked bactericidal properties.—*Medical Record*.

SOCIETY PROCEEDINGS.

ALLEN COUNTY MEDICAL SOCIETY.

At the regular meeting of the Allen County Medical Society held at the Assembly Room in the Court House, Fort Wayne, on Tuesday evening, October 15th, two papers were presented. Dr. Nichols read a paper upon dyspepsia, which was passed without discussion.

Dr. McCaskey reported a case of leukaemia with several interesting features, one of which was that the leukaemia was preceded for several years by a severe chronic colitis, and a physiological leucocytosis. Careful examination of the blood was made two years and a half before the leukaemia was recognized, and while the white cell count materially increased no myelocytes were present, the white cells being strictly normal in every respect excepting numbers.

He also reported a case of latent hysteria in the male with disturbances of sensation. There was analgesia of the lower extremities, and a disturbance of the thermal sensation which he described as a "disassociation of the temperature senses with reversal of perception of cold"—the latter being perceived as heat. The diagnosis was further established by corneal anaesthesia and a partial reversal of the color fields of vision. He considered the co-existence of organic cord disease possible, and emphasized the importance of constantly searching for the latter, even after hysteria is fully established.

Another case reported by Dr. McCaskey was that of cancer and tuberculosis in the same individual, the former having been recognized, and the latter latent, although involving the entire area of the lungs which were studded with miliary tubercles. The case ran an entirely afebrile course, and was exceedingly rare on account of the association of the two diseases. There were no physical signs of the pulmonary lesion, the patient dying before bronchitis or tissue necrosis occurred.

This paper was discussed by Drs. Porter, B. Van Sweringen, English, Duemling, Bulson, Buchman and others.

The regular meeting of the Allen County Medical Society held in the Assembly Room of the Court House (Fort Wayne) on Tuesday evening, October 29th, was one of the four "open nights" of the year when medical men not members of the Society are solicited by special invitation to address the Society. Dr. W. A. Evans, of the College of Physicians and Surgeons, Chicago, was the essayist for the evening and presented a very interesting and highly scientific paper upon "Fat Necrosis," with report of four cases that came under his personal observation. An abstract of this paper, prepared by Dr. Evans, appears in this issue in the department of original articles.

The paper was discussed by Dr. McCaskey, Porter, Rosenthal, B. Van Sweringen and Duemling. No member of the Society present, however, had met with a case of recognized fat necrosis, though it was thought probable that such a condition might have been discovered by post mortem examination in some cases, even though not understood. The recent recognition of this condition, particularly as a complication of or associated with gall stones, will have an important bearing upon prognosis in gall stone cases, particularly as no line of treatment has been recommended.

Following the scientific session the members of the Society and invited guests to the number of a hundred or more met Dr. Evans at a reception at the home of the president, Dr. E. J. McOscar, on West Jefferson street.

The Jackson (Michigan) County Medical Society held its quarterly meeting October 8, at Jackson. Tuberculosis was discussed by Drs. Kugler, Hubbard, and Williams; Food Adulteration by Drs. Hodge, Main and Martindale; Stricture of the Male Urethra by Drs. Rogers, Robinson and Munro. Professor Victor C. Vaughan spoke on Cirrhosis Hepatis. The officers are: President, Dr. Bulson; vice president, Dr. Strong; secretary, Dr. Wilton; treasurer, Dr. Rogers.--*American Medicine*.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

THE JOURNAL-MAGAZINE SPECIAL OFFER.

For every one dollar sent us as a new subscription, or as a renewal subscription to the Journal-Magazine, between the first of September and the first of January, 1902, we will send for one year, to any address, the *Cosmopolitan Magazine*, the net price for which is one dollar and the *Fort Wayne Medical Journal-Magazine*, the net price for which is also one dollar. Let us have your subscriptions before this offer expires.

STILL LOOKING FOR DUPES.

Medical men all over the country are still receiving circulars from St. Luke's Hospital, at Niles, Mich., which offers a hospital position, and diploma certifying to the fact, upon the payment of fees ranging from \$10.00 upward.

We have repeatedly called attention to the fact that this institution is one of the greatest swindling concerns that was ever operated. No intelligent or self-respecting medical man should pay any attention to the "rosy" offers which the human sharks of St. Luke's hospital at Niles, Mich., make to medical men whom they desire to dupe. The concern has been organized with a view

to swindling medical men, and any man who is tempted by the offers made by this concern can expect to receive no greater return for his money than results from the purchase of a "gold brick."

A. E. B.

OPENING OF THE MEDICAL SCHOOLS.

During the month of September nearly all of the medical schools in the country opened for the session of 1901 and 1902. From various sources the report reaches us that never in the history of medical colleges have the classes been so large, and what is better still, never has the standard of education among the matriculates been so high.

While we are pleased to note that medical colleges are constantly raising the standard of requirements, and lengthening the courses of instruction, thus elevating the standard of education possessed by the graduates, yet we cannot help feeling that this large increase in the number of students who are beginning the study of medicine, with a probable increase in the number of physicians in the country, is detrimental in the sense that we already have more physicians in the United States than can possibly earn a comfortable income for each man. We are told that even at the present time many well educated and thoroughly competent physicians in some of the eastern states are abandoning the practice of medicine, for the reason that they cannot make a comfortable living in competition with such a large number of medical men of equal ability.

The question really threatens to become a serious one, if we are to preserve the high moral standard previously occupied by the medical profession. In the populous districts medical men are deprived of a large percentage of work through the ease with which the sick and suffering can obtain gratuitous attention at the large hospitals and dispensaries. The tendency for good men to adopt many of the methods of the quack in order to obtain business has increased with the increase in the ratio of physicians, owing to the difficulty with which men practicing medicine along ethical lines can obtain business. This ultimately must end in a general lowering of the high moral and professional plane upon which our profession formerly stood, unless something is done to prevent the conditions which bring about such active competition

among medical men for the obtaining of practice. Relief must come from the fountain head, or through the medical colleges responsible for the great increase in the number of graduates who are yearly turned out to fight one another in the mad desire to secure a practice that will insure a comfortable living.

As stated in a former issue of the JOURNAL-MAGAZINE, our own solution of the problem would be to wipe out of existence about two-thirds of the number of medical colleges which now exist, and increase both the requirements for entrance as well as the course of instruction in the other one-third. A. E. B.

A BETTER KNOWLEDGE OF THERAPEUTICS A DESIDERATUM.

In an article on "The Teaching of Therapeutics," by Professor Rotch, of Havard University, attention is called to a department of medical study that is too frequently neglected and often insufficiently studied of all the fields of medical knowledge. The subject of therapeutics as taught and studied in a majority of the American medical colleges falls far short of the thoroughness that is bestowed upon other branches of the medical curriculum, and results in a condition that places the young medical graduate at a serious disadvantage in the early years of his practice. There can be no question regarding the value to the student of laboratory study of the action of various drugs, both chemical and therapeutic, as a broad basis for the later clinical study at the bedside, and Professor Rotch justly lays proper emphasis upon this as a preliminary necessity for a thorough appreciation of its effects in a later study upon the human being. Rotch pertinently calls attention to a number of faults in the present and too common method of teaching therapeutics when he says that too little attention and time are given to the elementary principles of therapeutics in comparison with that given to the other primary branches of medicine and surgery; and again as a result of this scanty knowledge of therapeutics the young practitioner too often becomes a believer in the efficacy of a drug on the strength of claims that are made for it not wisely but too well, and too frequently he is unable to distinguish the good from the bad owing to his lack of a thorough knowledge of its therapeutic effects. His objection to the laboratory teacher attempting to give the clinical side of the

subject for which he is often unfit from the lack of continued clinical experience, is noteworthy, as is that of the clinical teacher who, after making an elaborate diagnosis dismisses the question of therapeutics in a few words. Too frequently other therapeutic measures than drugs are entirely overlooked, and of these none has a more important place than diet, particularly that of infants which is too often but briefly mentioned.

Rotch adds at the close of his article that too little instruction is given to the student in the simple and common sense details connected with the administration of drugs. These are wholesome truths and one of which many a young practitioner fully realizes the need after a short time in general practice.

There is nothing so essential to the physician as a thorough knowledge of therapeutics, and there is probably not one subject in the science of medicine of which the study is so incomplete.—*Courier of Medicine*.

DIVISION OF FEES.

The following from the pen of Dr. O. M. Layton, of Fairwater, Wis., (*Alkaloidal Clinic*) is so forceful, so true and so timely that we think it worth reproducing. That it is from the pen of a general practitioner and a country practitioner at that is an additional reason for its reproduction:

"So much has been said pro and con on the question of division of fees, that I feel entitled to the expression of an opinion. I am only a country doctor but I do not believe in any division of fees. We country doctors were educated in the same schools as the city doctors, and often-times have acquired just as much practice and experience as our city brethren. I have done some operating and where I do an operation I expect the pay, outside any legitimate fees for assistance. The laborer is worthy of his hire and the man who does the work is entitled to the pay. If I am not able to do any particular operation it is my own fault, and I do not expect to be paid for my ignorance.

The man who has spent the necessary time and money to acquire special ability is entitled to all the remuneration which his knowledge and experience bring him. The post graduate schools and hospitals are still open; the same road he traveled was and is still open to me if I am not satisfied with my present condition.

Every doctor is licensed to do and charge for whatever work his knowledge and experience justify him in undertaking. We have too often sent patients to some specialist when we could just as well have done the work ourselves. But once sent the patient is out of our hands, and we are not entitled to any further pay. In case of surgical operations which we do not care to undertake, it is our privilege to take them to a hospital and assist in the work, after we have demonstrated our ability to do so. The patient is the one to pay for such services and not the surgeon. I believe it is the basest commercialism to traffic in a patient's welfare or auction him off to the highest bidder. I believe in charging for my professional services however rendered, and permitting other physicians to do the same."

M. F. P.

WHO IS ENTITLED TO THE SPECIMEN?

Dr. C. J. Holman, in *American Medicine* of Sept. 7th, reports that a patient from whom he removed a large number of gall stones, has demanded the specimens, and threatens to go to the courts to get possession. The question is asked, "who is entitled to the specimens, the surgeon who operates, or the patient?"

If we were answering the question we would say that the patient is entitled to the specimens if he demands them. It is seldom that a physician is refused an interesting specimen if the request for it is made to the patient in proper form. In case the patient refuses to allow the physician to retain the specimen, we believe it not only the duty, but common courtesy to the patient to relinquish all claims upon the specimen. We care not what the legal status of the case may be, from a moral standpoint the physician or surgeon has no right to retain the specimen in the face of objections on the part of the patient.

A. E. B.

FORMALDEHYDE IN MILK.

Formaldehyde still continues to be the principle milk preservative used by dairymen throughout the country, and particularly throughout Indiana, where we have on more than one occasion been made acquainted with the fact through the prosecution of milk venders by State and County Boards of Health.

Quite recently the city bacteriologist for Fort Wayne dis-

covered that a majority of the milk venders in the city of Fort Wayne were using formaldehyde as a milk preservative, and in some instances in sufficient quantities to be actually dangerous to life. Sufficient evidence having been secured to effect a conviction in court, the city bacteriologist, Dr. McBeth, asked the prosecuting attorney to bring the offenders into court for punishment. Fearing failure to secure judgment with subsequent mulcting of the city for damages, the prosecutor avoided the performance of his duties. Not to be baffled in this manner, the city bacteriologist promptly filed affidavits against a number of the dairymen who sell milk in the city of Fort Wayne, and was rewarded by securing a conviction and an admittance of guilt in each case, and the payment of a heavy fine. It is to be hoped that punishment of the offenders will result in a lessened tendency on the part of milk venders to furnish the people of Fort Wayne with adulterated milk. Meanwhile our physicians are reporting numerous cases of intestinal and gastric inflammation, which they attribute directly to the influence of milk contaminated with formaldehyde.

No punishment can be too severe for the man who adulterates food products which are the life of the people. Milk forms the principle article of diet of the children who constitute the larger portion of the population. To use formaldehyde in milk to the extent in which it was employed by some of the Fort Wayne milk venders, as evidenced by the testimony of city bacteriologist McBeth, is to place the lives of hundreds of children in jeopardy, with the possibility of a fatal issue in some cases. The assessment of a fine for such practices is altogether too mild punishment, and we advocate the passage of more stringent laws covering the subject.

A. E. B.

THE VIRCHOW ANNIVERSARY.

The eightieth birthday of the sage of Berlin—but not confined to Berlin, for, like Shakespeare, he is claimed by the whole world—fell on Sunday last. It was observed by medical men throughout a large part of the civilized world. Here in America it was celebrated by a dinner at Sherry's, given on Saturday evening. Dr. William Osler, of Baltimore, presided, and there were present representative physicians from several states of the union. Dr. Osler was particularly felicitous in his remarks, and so, too, was

Dr. William H. Welch, of Baltimore. To say that our own Dr. Jacobi contributed conspicuously to the expressions of appreciation of the great Virchow's achievements and of admiration of his character would be but to set down in cold type what the whole American profession knows have been the case.

The bond of loving esteem by which Rudolf Virchow holds medical men of all countries encircle not alone those who have had the good fortune to meet him; his writings, especially in the *Archiv für Pathologische Anatomie und Physiologie und für klinische Medizin*, commonly called Virchow's *Archiv*, have bound physicians of all countries as his admirers. He is recognized everywhere, and long has been, as foremost among the leaders of medical investigation and thought for more than half a century past. If we English-speaking people ever think of him as a German, it is only as a grand old Acht-und-vierziger but in reality we think of him only as a man of science. The steady light of his conservatism, no less than the keen insight into physiology and pathology always displayed by him, has long been a powerful agency in anchoring medicine to the firm ground of truth.

Rudolf Virchow is eighty years old. He has well earned the privilege of an old age of retirement, but we have as yet no evidence that he is disposed to avail himself of his title to continued life at the price of inactivity. In his case we may well picture to ourselves, the oncoming of real senility will usher in the ripening process so feelingly depicted by Sir James Paget; but far off, we believe is any enfeebled state in a man of his intellectual powers. For many a year to come the world will defer to his opinions, and it will never cease to rate his contributions to the progress of medicine at a high value. May he yet live long to round out the picture of a blameless and illustrious career.—*N. Y. Med. Jour.*

A McKINLEY MEMORIAL.

The announcement has been made that a McKinley hospital is to be erected in the city of Washington in honor of our late beloved president. Commenting upon this Dr. Knopf, of New York, has a communication in the *Journal of the American Medical Association*, of October 12th, which we think is worthy of consideration.

Dr. Knopf says, that beautiful as the idea may be, he believes

that a little memorial hospital erected in Washington is not a great enough tribute to a nation's president, such as William McKinley. While admitting that there may be room enough in Washington for a hospital for the treatment of general diseases, he believes that there is no urgent need for it. On the other hand he says that all physicians and charity workers of our large eastern and western states are aware of the fact that there is a crying and urgent need of a sanitarium, or rather several sanatoria, where the many little scrofulous and tuberculous children of poor parents can receive treatment, care and the necessary education.

France, Germany, Holland, Italy and the Scandinavian countries all have seaside sanatoria, where the little sufferers afflicted with the above diseases receive care. These seacoast climates combined with proper sanatoria treatment seem to produce really wonderful results in scrofulous and tuberculous children. The reports of some of the European seaside sanatoria state an average of 75 per cent. of cures.

We in America have, with the exception of one or two small children's hospitals and a few floating hospitals during the summer months, no such institutions. To realize the urgent need of seaside sanatoria for children one must have visited the crowded tenant districts of our great states and seen the large number of scrofulous and tuberculous children and the many who bear on their pale little faces the stamp of candidates for consumption.

There are already laws in some states prohibiting the tuberculous child from attending public school, but so far as known none of these states have provided other places where children suffering from the chronic, communicable, and also curable diseases can receive the education to which they are entitled, much less where they can have a chance of being cured of their affliction.

Continuing, Dr. Knopf says that our martyred president had two children and these he lost. He dearly loved little children, and the erection of a sanatorium for the treatment and prevention of a disease with which so many American children are afflicted, would surely be a fitting memorial to this great man and lover of children. "The McKinley Sanatorium for the Treatment and Prevention of Tuberculous Diseases in Children," should be the name of such an institution.

The meaning of the name William McKinley written on the portals of these "houses of hope" for many a suffering mother's

heart, will be made clear to those little inmates by their teachers and grown-up friends. The word McKinley will embody to those little sufferers all that is needed for good parents, noble men and women, true American citizens. McKinley's fortitude during the last days of his life must teach them what patience should be. "Trust in God, confidence in their physician, patience." His words of forgiveness to the very man who slew him must show these little children the sublimity and nobleness of his character. McKinley's life as a man, statesman, patriot and president embody all that is truly American. A better example to teach our children the meaning of true manhood and true patriotism we cannot find.

Let all American men and women who can afford it contribute through their children or through their children's friends a realization toward this McKinley sanatorium. Let us build an institution where the lives of American children can be saved, to be sent forth in health and vigor to their respective communities to help finish the work for which William McKinley lived and died, to make the American nation the greatest, noblest and foremost of the world.

A. E. B.

THE OPEN AIR TREATMENT OF CONSUMPTION.

The good results secured by the open air treatment of consumption are now so thoroughly appreciated by those who have been experimenting with the method for several years, that the subject should receive more attention at the hands of the average physician.

In various portions of England, Germany, France and the United States there have been established in suitable localities consumptive colonies, with a view to carrying out upon a systematic and scientific basis the open air treatment of tuberculosis. In some instances a well equipped sanitarium has been a part of the equipment, while in others the patients, with their attendants, have formed little else than a large camp, the patients preferring to live as close to nature as possible, and doing away with nearly all protection from the elements excepting such roof covering or screens as are necessary to offer protection from the more severe storms.

In these communities it has been the aim to make the open air treatment all that its name implies, and accordingly the patients live in the open air all the time, even to sleeping and eating, and in all kinds of weather.

The reports coming from these places are more than encouraging as to the benefits derived from treating tuberculosis by the open air method. In some instances patients who have begun the open air treatment at a time when it seemed probable that a fatal issue would soon occur, have begun to improve, and at the end of from one to two years been pronounced practically cured. The best results, however, have occurred in those cases in which the treatment was begun early, and these results prove that tuberculosis is, in the majority of instances, a curable affection if early diagnosed and properly treated.

The varying climates and conditions under which open air treatment has been successfully carried out indicate that while a favoring climate is a distinct advantage, yet no climate is a positive bar to the securing of beneficial results by this method of treatment. Physicians all over the world are called upon to treat tuberculous subjects, and it is not only possible for every physician to adopt the open air treatment for his patients, but entirely within the bounds of possibility to secure beneficial and in some cases curative results by the adoption of such form of treatment.

Few families are so poor that they cannot afford at least a tent, and perhaps a commodious porch with a southern exposure, and this with an ordinary bed and sufficient clothing to keep the patient warm are all that are required. Zero weather or snow should not interfere with the treatment, the patient being kept in the open air and made comfortable with heavy furs, and hot water bottles. Food should be taken often and regularly, the nourishment selected being easily digested and nourishing. The kind and amount of exercise should be determined by the physical condition of the patient and its effect upon the temperature. No exercise should be taken to the point of fatigue, and no exercise should be continued if it produces rise in temperature. A record of the temperature, pulse, weight, nourishment, exercise, cough, expectoration, and all other points of interest to the physician should be carefully taken, and the general management of the case should be in the hands of the physician, who should lay down explicit rules for the guidance of the patient and those who are attending him. Medication, but little of which is usually required, should be selected with great care by the medical attendant.

As the danger of infection from a consumptive is not from his breath but in what he coughs up, care should be exercised to pre-

vent any of the sputa from coming in contact with anything but the paper boxes, paper napkins, or other suitable receptacles, which are promptly burned.

This open air treatment of consumption is available to the poor as well as the rich, and is worthy of adoption by every physician who wishes to give his tuberculous patients the benefit of the best home treatment. It is our candid opinion that the treatment should be *the* treatment in all cases

A. E. B.

THE TESTIMONIAL BANQUET IN HONOR OF DR. N. S. DAVIS.

A testimonial banquet was given to Dr. N. S. Davis, the father of the American Medical Association and the first editor of its Journal, nestor of the medical profession, founder of the Mercy hospital, and distinguished teacher and author, at the Auditorium Hotel, Chicago, October 5, 1901, under the auspices of the Chicago Medical Society. Nearly 400 physicians from Chicago and various parts of the country were present in testimony of the high esteem in which Dr. Davis is held. Among those who responded to appropriate toasts were the following well known medical men: Drs. Frank Billings, Edward F. Wells, Norman Bridge, Edmund Andrews, F. X. Waxham, J. H. Hollister, Chas. A. L. Reed, Donald McClain, Archibald Church, Victor C. Vaughan, Hobart A. Hare, Edwin Ricketts and Robert Babcock. Dr. Frank Billings acted as toastmaster, and in his opening address gave a short history of the life of Dr. Davis, which will bear repeating in condensed form.

Dr. Davis was born in New York state, Jan. 19, 1817, and graduated in medicine in 1837, when he was not quite 21 years of age, from the College of Physicians and Surgeons of the Western District of New York. He then practiced medicine in Binghamton, N. Y., for about ten years, and seeking wider fields, or people in a better field seeking him, he went to New York City, where he remained about two years. He went to Chicago in 1849 and taught in Rush Medical College for the next ten years. Not satisfied with the method of teaching at that time, and desiring a different method and longer course, he, with others, severed his connection with that school and founded the Chicago Medical College in 1859. Since that time he has remained connected with the Chicago Medical College. Throughout his entire life from the time

of his graduation in 1837 to the present time, a period of 64 years, he has been in active practice.

Dr. Davis is known throughout the whole country as a medical teacher and as a lever to elevate medical education. As a teacher he has become eminent, and some of the foremost medical men of the United States were at one time his pupils. Among these may be named, Drs. Nicholas Senn, Norman Bridge, Frank Billings, N. S. Davis, Jr., Arthur R. Edwards, Roswell Park, John A. Fordyce, and many others.

Through the efforts of Dr. Davis the American Medical Association was founded. He has been president of the Illinois State Medical Society, of the Chicago Medical Society, of the American Medical Association, and the only American who was ever president of an International Medical Congress.

Dr. Edward F. Wells, with an appropriate speech presented the loving cup, after which Dr. Davis, amid a storm of applause, arose to accept the cup and address the assembly. Those who were fortunate enough to be present will long remember the impressiveness of the scene. The white-haired "father of the medical profession of America," with a face and bearing indicative of superior intelligence and the highest type of integrity and tenacity of purpose, but bearing little evidence of the 84 long years through which he has lived, presented a picture to those who looked upon it which will forever stand for that which is noblest and best in the medical profession.

Dr. Davis' remarks were in keeping with the occasion and are worthy of reproduction in part as follows: "Mr. Toastmaster, and Fellow Members of the Medical Profession:—It is useless for me to say that there are no words at my command by which I can convey my idea of the gratitude that fills my soul at the present time. If there is any particular thing that has guided my course through life, and if I have been able to contribute anything of value that justifies your presence and this most generous exhibition of your kindness and respect to me, it is from a very simple principle of action. At the age of seven years, as a boy who had never been outside his father's farm, born in a log house, and when still in a log house, I was called to the bedside of my dying mother to receive her last words. I was the youngest of a family of seven children; I was in my seventh year. It made a vivid impression upon my mind. She was a Christian—a reader of the Bible. She

said to me that she wished me to be a good boy, to learn to worship God, and to do good to my fellowmen. I promised her I would. Of course, I did not realize the importance or bearing of that promise at that early period of life; but an impression was made upon my mind, and from that day to this the rule of my life has been, that whatever comes up that seems to be important and will improve my fellowmen, my impulse is to do what I can to help it along. (Applause.) That is the whole foundation of it. I refused to undertake anything the results of which would not be beneficial to those around me, whatever it might be. The question was, 'Would it benefit my fellowmen?' If it would, I supported it. I refused on the other hand, to lay up enmity against any human being, and today I stand here and say that I know of no man or woman for whom I have an evil wish, and there is not one to whom I would not extend a helping hand at any moment if they were within my reach and needed it. (Applause.)

"On this principle of action and reading the book that my mother pointed to and taught me to read, there was revealed a habit that in old times the patriarchs often formed a covenant with their God, and in my innocent early boyhood, as I grew on, a proposition was made for me to study medicine. I no sooner began than I formed a covenant with my Creator, that he would guide me, so that I could be qualified to do good to the sick, to alleviate human suffering, and to prolong human life. I dedicated my life to that great leading idea, and from that day to this I have striven to follow in that line."

In closing, Dr. Davis uttered these remarkable words: "My friends, I don't want to tire you by reciting details. Please accept my most cordial thanks for this demonstration. It will probably be the last time I shall have an opportunity to address you. But if you want to promote harmony, cordiality, advancement; if you want to build up, stop pulling down anybody. Never pull down, but build up, and if your neighbor does not do as you think he ought to do, talk about his good qualities, and let his bad ones go. You will soon establish harmony; you will soon have cordiality; you will have your own heart free, and your conscience will be right before your God. You will have neither enemies here nor hereafter. I know no enemies tonight; I have no enmities; I am satisfied with life.

"I am sometimes lonesome because I so rarely meet one of my

early comrades—lonesome because they are gone. But I am going to join them before long. I do not expect to tarry a great while. But I have no care about that. I live so that each day I am ready to go. I have no settlements to make; I have no great fortune to give away; I have got enough for my comforts, enough to clothe and feed me as long as I live. That is all I want. I would not die worth a hundred million of dollars; I should be afraid I had not done my duty.”

A. E. B.

NEWS NOTES AND COMMENTS

ALCOHOL IN CARBOLIC ACID POISONING.—An exchange offers the following advice: “Whatever else you do in internal carbolic acid poisoning, give at once a large dose of alcohol—whiskey, brandy, rum or gin will answer, and repeat it often.”

USED TOBACCO AND LIQUOR FOR A CENTURY.—The daily papers recently announced that a woman living at St. Joseph, Mo., who has been one of the historical characters of that city and state had died there at the age of 110 years. For more than a century she had been addicted to more than ordinary use of tobacco and liquor.

PERMANGANATE OF POTASSIUM IN ACUTE MORPHINE INTOXICATION.—Dr. Leonard Weber reports, in the *Medical Record* of Oct. 5th, a case of acute morphine intoxication with alarming symptoms which was promptly and effectually relieved by hypodermic injections of one-fourth grain permanganate of potassium repeated every ten minutes until two grains had been given.

GERSUNY'S PARAFFIN FOR PROTHESIS.—A correspondent of the *Journal of the American Medical Association* makes inquiry as to the character of the paraffin which Gersuny uses in his subcutaneous paraffin prothesis. In answering the communication the statement is made that the material used by Gersuny is American white vaseline, which is soft at ordinary room temperature.

RUBBER GLOVES FOR OPERATORS.—After considerable discussion as to the necessity or advisability of using rubber gloves in operative surgery, the Paris physicians have finally come to the conclusion that it is well to use rubber gloves when performing septic operations, but that in cases where no septic contact has been experienced an operation may be well carried out without them.

DR. O'DAY REMAINS IN MONTPELIER.—Under New York news, in a recent number of the *Journal of the American Medical Association*, appears the announcement that Dr. J. C. O'Day, of Montpelier, Ind., has moved to Bradford, Pa. Through a reliable source we learn that Dr. O'Day has no intention of moving from Montpelier at the present time, and has not authorized anyone to announce his removal.

INDIANAPOLIS PERSONALS.—Drs. John L. Masters, Hugo O. Pantzer and S. P. Scherer are in Berlin taking postgraduate courses in medicine. Dr. Masters is devoting his attention to Ophthalmology, Dr. Pantzer to abdominal surgery and diseases of women, and Dr. Scherer to the diseases of the digestive system.

Dr. J. Rilas Eastman has just returned from Berlin, after several months of postgraduate study in surgery.—*Medical and Surgical Monitor*.

THE MOSQUITO PEST IN BALTIMORE.—On September 23 the First Branch City Council of Baltimore passed an ordinance appropriating \$15,000 to be used by the health commissioner to defray the expense incident to the extermination of mosquitoes. The plan proposed is to keep all cesspools covered with kerosene from early spring to late summer and to enforce rigidly all existing laws compelling the drainage of any stagnant pools.—*American Medicine*.

EXPERIMENT WITH TUBERCULOSIS.—Dr. Garnault, the French physician, has arrived in Berlin and offered himself to Professor Koch for experiments on the identity of human and bovine tuberculosis. Professor Koch declined to give injections, but advised him to drink unsterilized milk from a tuberculous cow for one year, and as far as possible abstain from other foods. This he

will do, but in addition, will have an injection of highly virulent bacilli every month.—*American Medicine*.

SALICYLATES IN RHEUMATISM.—Dr. Solis-Cohen, (*American Medicine*, Oct. 5th) says that the treatment of rheumatic fever with salicylates will prove unsatisfactory to the physician unless the remedy is pushed to the full physiologic effect, as manifested by roaring in the ears, when it should be decreased but not entirely withdrawn. He recommends that salicylic acid should be given in doses of from 7 to 10 grains every two hours, followed by a glass of milk to avoid irritation of the stomach.

YOHIMBIN WORTHLESS AS AN APHRODISIAC.—Certain physicians as well as patent medicine venders have been advocating the use of yohimbin as an aphrodisiac. Recent physiologic and therapeutic studies of the drug by reliable clinicians seem to indicate that the drug is absolutely worthless for the purpose for which it is recommended. The drug was given to six physicians, some of whom suffered from functional impotence due to neurasthenia; the others were perfectly well. Not only were the results negative so far as an aphrodisiac was concerned, but nausea, salivation, irritability, and congestion of the conjunctivae were marked.—*Exchange*.

CAN ANESTHESIA BE INDUCED DURING SLEEP?—In the course of a recent trial it was stated by an expert medical witness that it was not possible to produce anesthesia in the case of a sleeping individual, and it does not appear that this statement was challenged in cross examination. It might easily have been pointed out to the court that a number of experiments by recognized authorities have been conducted with the view to determining the fact, resulting in the discovery that while it is practically impossible to induce anesthesia in a sleeping individual by ether, it is not impossible nor even difficult for an expert anesthetist to accomplish the end with chloroform.

NEW JERSEY MOSQUITOES TO SUFFER.—The state entomologist of New Jersey has requested the boards of health of that state to co-operate with him in a war against mosquitoes. The leading

state papers are taking up the subject and the next legislature will be asked to assist in the work of exterminating the pests. Just what method will be adopted to rid the state of mosquitoes is not stated, but judging from the pictorial comments which we have seen regarding the size and number of New Jersey mosquitoes, we would naturally conclude that the state entomologist and his assistants will have to go after the pests with a battalion of artillery.

THE SPECIALIST AND THE GENERAL PHYSICIAN.—Commenting upon this subject the editor of *American Medicine* says that while the family doctor is slowly but surely losing a portion of his practice because of the increase in the number of specialists, who seem better qualified to treat certain affections than the general practitioner, yet it must be remembered that there is a broad field which will forever belong to the family doctor. On the other hand it is a fact that a man who treats all cases must mistreat many of them. The infinite extent of acquirement in modern medicine has made it impossible for one mind to grasp all details of the whole—and on details rests success—within the time of one short life. It has been charged that the specialist sees things only from his own limited field of vision, but there is less danger of narrowness in the specialist than of superficiality and quackery in the one who attempts too much.

HEROIN IN WHOOPING COUGH.—Dr. H. H. Haralson, of Vicksburg, Miss., recommends the administration of heroin, beginning early in the attack and continuing it through the catarrhal and paroxysmal stage. During the last stage he recommends tonics, good nourishment and proper hygienic surroundings. The following combination is employed by him:

R. Heroin hydrochlor $\frac{1}{4}$ to $\frac{1}{2}$ grain.
 Tinct. belladonnae I dram.
 Spts. frumenti I ounce.
 Syrupi simplicis, q. s. ad 4 ounces.

M. Sig: One teaspoonful every five or six hours.

Dr. Haralson seems to be very enthusiastic over his success in ameliorating the paroxysm and lengthening the time between the paroxysms as well as cutting short the duration of the disease.
 —*Jour. A. M. A.*

THE INDIANA INSANITY TRUST.—Some weeks ago the report became current that some of the insane hospitals in Indiana contained inmates who were confined without due examination as to sanity and particularly without a thorough examination on the part of the medical boards appointed for the purpose. In other words, it was charged that patients, sane or insane, had been “rail-roaded” into the insane asylums by the hospital physicians for the sake of the fees attached. An investigation was ordered by the governor and it is gratifying to know that a report of this investigation by the State Board of Charities, says that an effort to connect the “Insanity Trust” with the hospitals was unfair to the institutions. The report further says that no sane persons are confined in the insane hospitals, and have not been within the last sixteen months, unless in the case of one patient who probably recovered after he was found insane, and before he was received at the hospital—a period of fifty-three days.

THE FORM OF VACCINE TO BE USED.—The *New York Medical Journal* has been presenting a series of articles relative to the value of the two principal forms of vaccine lymph, the dried and the glycerinated, a prize being offered for the article presenting the best arguments. Notwithstanding the fact that a large number of articles bearing upon the subject were presented for publication and that an overwhelming majority of the number were in favor of the glycerinated lymph, the editor of the *New York Medical Journal* has seen fit to award the prize to a physician advocating the use of dry lymph.

The principal arguments advanced are that dry lymph when properly prepared may be preserved and transported unimpaired to any part of the world. On the other hand it is argued that glycerinated lymph does not bear keeping, but must be fresh in order to insure potency. It is also argued that the addition of glycerine has a tendency to dilute the vaccine and diminish its potency, while it also offers opportunity for contamination.

SUMMONING OF SURGEON BY CONDUCTOR OF WRECKING CREW AND LIABILITY OF RAILROAD COMPANY.—The Appellate Court of Illinois, Third District, says, in the case of the Chicago & Alton Railroad Company vs. Davis, that the rule is well settled in this

state that where an accident happens to an employe of a railroad company, the local surgeons of the company are not in the vicinity, and the condition of the injured man requires prompt medical attention, that the representative of the company in authority at the time and place of injury has the right to employ medical assistance. If a doctor is sent for by such representative of the company, and, at his instance, performs professional services for the injured employe, the company will be liable to pay for such service. So, where an employe was badly injured and an emergency for prompt medical aid existed, and the man in supreme authority at the time was the conductor of a wrecking crew, who directed another man to call a doctor, and the latter performed the service in response to such call, the court thinks that the physician had a clear right of recovery for such services in an action against the railroad company.—*Jour. A. M. A.*

EXPERT MEDICAL WITNESSES IN THE DUNN MURDER CASE.—The Dunn murder trial, which occupied the attention of the Circuit Court in Fort Wayne during the October term, brought out an abundance of conflicting medical testimony. Dr. W. W. Barnett, County Coroner, Dr. A. H. McBeth, City Chemist and Bacteriologist, and Dr. Frank Greenwell, of Hometown, were the expert medical witnesses for the state, while Drs. Maurice I. Rosenthal and George L. Greenwalt, of Fort Wayne, were the medical experts for the defense.

The physicians testifying for the prosecution claim that there was abundance of evidence to warrant the opinion that the prisoner Dunn first raped the little girl, then choked her to death, and subsequently attempted to cover up his crime by throwing the body into a cistern. The physicians for the defense are equally positive that there is no evidence to prove that the little girl was raped, or that there was an attempt at rape, or that death had resulted from choking. On the one side an attempt is made to prove that death occurred before the body got into the cistern, while on the other hand the defense is attempting to prove that death occurred as a result of drowning, and not as a result of any violence occurring before the body reached the cistern.

The striking feature of the case is the disparity of medical testimony, and the absolute certainty with which the experts on both sides testify to the facts as they understand them.

TEN COMMANDMENTS.—For the nurses in the sick chamber, not by Moses, but by G. E. Potter, M. D., Newark, N. J.:

1. Thou shalt remove surplus rugs, furniture, etc., and make ample room for your work.
 2. Thou shalt maintain perfect ventilation without draughts.
 3. Thou shalt keep the patient clean and quiet.
 4. Thou shalt foresee the needs of your patients, don't let them ask for everything.
 5. Thou shalt promptly remove and burn all sputum and thoroughly disinfect all culinary utensils and vessels used by the patient.
 6. Thou shalt restrict visiting, loud talking and above all whispering in the sick chamber.
 7. Thou shalt not ask the sick what they want to eat; rather say, "I have prepared something dainty, and I want you to eat it."
 8. Thou shalt not annoy the sick by telling your troubles, sad experiences, and *all* you know.
 9. Thou shalt let in the sunshine and try to be a sunbeam yourself.
 10. Thou shalt remember that the tenth commandment is to mind your own business, follow directions faithfully, cheerfully and promptly, and the sick will arise and call you blessed.—*Exchange.*
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UNUSAL HONESTY.—A STORY OF DR. N. S. DAVIS.—In a leading article in the *Chicago Clinic*, of October, appears the following story regarding Dr. N. S. Davis' absolute honesty and his Puritan sense of duty:

"Once on a time a rich man came to Chicago for treatment by Dr. Davis. He was a very busy and wealthy man, and after having been seen a few times by Dr. Davis at his office, who also made one trip to his patient at the hotel, the man was obliged to suddenly leave town without having paid his bill. A few days later he wrote to Dr. Davis explaining his reasons for so doing, and saying that he did not know the amount of the bill but took the liberty of enclosing, with his thanks, a check for \$100, which he trusted would be sufficient. It seems incredible, unless you know Dr. Davis, then you know he could not do anything else, viz: He returned the man a check for \$83.00, saying that the books of the office showed an indebtedness of \$17.00 for which he enclosed

a receipted bill and check for the balance. Call it what you please, but the man who is capable of such transparent honesty as that can rightfully stand up before his loyal friends in his eighty-fifth year and truthfully say: "I am satisfied with life. I have no enemies. I have done what I wanted to accomplish. I have enough to feed and clothe me to the end. I would not like to die a millionaire, for I should feel that I hadn't done my duty."

A REASONING ANTIVIVISECTIONIST.—George F. Angell, president of the Massachusetts Society for the Prevention of Cruelty to Animals, and editor of *Our Dumb Animals*, in a letter to a correspondent on vivisection, puts the question succinctly as follows: "I fear that some of our antivivisection friends from constant thought on one subject have come to believe that a single stone in the superstructure is more important than all the other stones which compose the cathedral of humanity. The sum total of suffering inflicted upon the animal race in cattle transportation, slaughterhouses, and on the plains in winter, seal fisheries, shooting and wounding millions of birds, and a hundred thousand cruelties inflicted on the horse, dog, cat, cattle, sheep, and swine, in other forms than vivisection in a year—in other words, in rightly estimating the sum total of suffering of the dumb races, vivisection cannot be fairly said to be more than 1-365 part of the great total. We do not mean by this to depreciate the cruelty inflicted upon animals in useless vivisection, but we do wish to say that our friends who are giving all their thoughts to this subject, while carefully studying to do their work in most effective ways, which will tend to diminish rather than increase the practice, should never forget that their work is only one stone of the great cathedral, while human education is the foundation upon which every stone must stand or fall."—*Medicine*, October.

TRIBUTE TO VIRCHOW.—The eightieth birthday anniversary of Professor Virchow, Oct. 13, 1901, was a day of celebration for the German people, who recognize the value of the scientific investigations and discoveries of that "sage of medicine."

From the Associated Press bulletin from Berlin we learn that the name of Prof. Virchow was on all lips, and the German papers, without exception, were full of comments on his life and achievements.

All friends of medical science have been influenced by Virchow, and all physicians are his disciples on both sides of the ocean. His name is second to none, and therefore the dignitaries of science gathered in Berlin to honor themselves while also honoring their well deserved leader.

On the evening of Oct. 12th, a banquet in honor of Prof. Virchow was given in the lobby of the lower house of the Prussian Diet, which was attended by a distinguished gathering of delegates from all countries. Prof. Waldwyer, secretary of the Academy of Science, presented Prof. Virchow with 50,000 marks, subscribed by the medical men of Germany to increase the endowment of the Virchow Institute. It was also announced that Emperor William had conferred upon Prof. Virchow the great gold medal for science, and that the King of Italy had sent a gold medallion, bearing a portrait of himself.

In this connection it may be well to remark that even at eighty years of age Prof. Virchow possesses remarkable vitality, and is incessant in his scientific work. For many years he has allowed himself but four or five hours sleep daily, and his habits are as regular as clock work with reference to the time allowed to work and recreation.

CITY PERSONALS.—Drs. B. Van Sweringen and H. A. Duemling were expert medical witnesses in the Foellinger damage suit, the former for the defense, the latter for the prosecution. In this suit an attempt was made to prove that death had resulted as a direct result of carbolic acid poisoning, resulting from the application of carbolized cotton, improperly made by the defendant. The trial resulted in a disagreement of the jury.

The expert medical witnesses in the Dunn murder trial were Drs. W. W. Barnett, A. H. McBeth and Frank Greenwell for the prosecution, and Drs. Maurice Rosenthal and Geo. L. Greenawalt for the defense.

The wife of Dr. G. B. M. Bower died early in October as a direct result of inflammation of the kidneys. Mrs. Bower was an estimable woman, who commanded and retained the friendship and respect of a large number of acquaintances.

Dr. A. P. Buchman, president of the Physicians Guarantee Co., of Fort Wayne, reports that his company is doing a very large and successful business, and that physicians all over the

country are beginning to appreciate the value and necessity of a policy which protects them from malpractice suits. The company which Dr. Buchman represents writes the only satisfactory policy that is written, and is thoroughly responsible in all respects.

The engagement of Dr. Eric A. Crull and Miss Jessie Mac-Murray has been announced.

Among the Fort Wayne physicians who have recently procured very complete and expensive machines for static electricity, and x-ray examinations are Drs. G. W. McCaskey, L. P. Drayer, C. H. English and E. J. McOscar.

Dr. Henry J. Ranke has opened an office in the Lau Building.

Dr. K. K. Wheelock has a ten thousand dollar malpractice suit on his hands as a result of a partial facial paralysis following a mastoid operation. The circumstances attending the case do not warrant the charge, and it is not thought probable that any jury will find for the prosecution. Like nearly all malpractice suits the charges are without sufficient foundation.—

Dr. C. B. Stemen was recently called to St. Louis to perform a surgical operation and while there read by invitation a paper upon "Surgical Technique" before the Sante Fe R. R. Surgeons Association.

Dr. Miles F. Porter read a paper upon "Is it Advisable to Await Reaction from Shock in Severe Injuries before Operating," before the Wabash R. R. Surgeons' Association at St. Louis, Nov. 14th. The paper is published in this number of the JOURNAL-MAGAZINE.

The younger physicians of the city have organized a new medical society which is to be known as the Fort Wayne Academy of Medicine. Regular meetings will be held on every other Tuesday evening, alternating with the regular meetings of the Allen County Medical Society. According to the Constitution, the qualifications for membership are "youth, and inexperience in the medical literary world." The officers are: President, Dr. J. A. Lomas; Vice-President, Dr. A. L. Schneider; Secretary, Dr. A. F. Wermouth; Treasurer, Dr. Charles Bock; Program Committee, Dr. D. M. Leslie; Executive Committee, Drs. B. W. Rhamy and C. King. The Society starts out with fifteen charter members.

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

ICHTHYOL BATHS.—It appears that we must add to the other therapeutical actions of ichthyol certain prompt and decided effects upon the blood. Schutze (*Deutsche MedicinalZeitung*, 1901, No. 32, *Fortschritte der Medicin*, July 22d) has been using ichthyol baths in various forms of anaemia, in gouty conditions, and in diabetes, and he has constantly observed that after the baths the amount of haemoglobin in the blood was increased from twenty to forty per cent., and that the number of the red corpuscles rose by from a million to a million and a half. This effect was often recognizable after three baths, and always after fifteen or twenty, but the author has never witnessed it after ordinary warm baths. In a diabetic, hand in hand with the increase of haemoglobin there was a reduction of the amount of sugar in the urine from 1.3 to 0.24 per cent. To a bath of about sixty-two gallons he adds rather less than two ounces of ichthyol. The temperature of the bath is 95 degrees F., and its duration from ten to fifteen minutes.

THE USE OF GELATIN FOR CONTROLLING HEMORRHAGE.—Joseph Sailer (*Therapeutic Gazette*, August 15, 1901) reviews the literature on this subject, which, together with his own experience, justifies the following conclusions: (1) Gelatin increases the coagulability of the blood, whether applied locally, taken by the mouth, or injected subcutaneously or intravenously. (2) Applied locally it is harmless, and may, as Carnot suggested, aid in healing by improving the nutrition of the cells, although I regard this as doubtful; it may prove injurious by promoting bacterial

growth, and should probably always have some antiseptic added to it. (3) injected subcutaneously or intravenously it is entirely harmless, and when the technic is perfect, practically painless; the solution should be thoroughly sterile; the dose employed may vary from 15 to 45 grains of pure gelatine. (4) When administered by the mouth, from 15 grains to 10 ounces or more may be employed daily. (5) It is of advantage in any local hemorrhage, such as epistaxis, hemorrhoids or injuries. (6) It checks certain forms of internal hemorrhage, such as hemoptysis, hematemesis, metrorrhagia, melena neonatorum. (7) It appears to be the best remedy at our command in the treatment of hemophilia, and to be of great value in purpura hemorrhagic forms of infectious diseases. (8) At present it appears to be contraindicated in one condition only, acute nephritis.—*Amer. Med.*

ON THE SO-CALLED GLUTEN AND DIABETIC FOODS OF COMMERCE.—H. C. Sherman, in the *N. Y. Med. Journ.*, describes some of the samples of the so-called gluten and diabetic foods of commerce as follows: (1.) Diabetic biscuit, intended for use only in diabetes, said to contain little starch and no sugar and to be harmless and allowable in all cases and curative in their effects. The analysis shows this sample to have practically the same composition as ordinary soda crackers, such as sell from seven to ten cents a pound: (2) Gluten wafers, made tender by the addition of sweet butter and alleged to be "very useful in diabetes." Except for the fact that it is somewhat higher in fat, this sample has essentially the composition of dried bread made from the cheaper grades of ordinary flour. (3) Gluten of wheat. The detailed statement on the package recommends it for invalids, but does not especially mention diabetes. The analysis corresponds almost exactly with the average composition of ordinary Graham flour or the lower grades of baking flours. (4) A small hard cracker purporting to be made from the gluten of wheat mixed with water only. The composition of this sample is much like that of the preceding and closely resembles that of ordinary crackers made with "water only." (5) Gluten zwieback, recommended as very useful in diabetes. This contains nearly the same amount of gluten and of carbohydrates as the entire wheat flour. (6) The package in which this was sold was labeled "gluten wafers" without further statement or description. In the amount

of gluten they closely resemble the preceding. (7) So-called crude gluten. This is very similar in composition to the sample of the entire wheat flour. (8) Wheat gluten. It is alleged for this gluten that a large portion of the starch had been removed, and it is added that experience shows that it is better adapted to all but exceptional cases than pure gluten, besides being more palatable and less expensive. This sample contained 48 times as much carbohydrate as protein, a proportion quite similar to that shown by the entire wheat flour and one which might readily be obtained by simply grinding selected wheat. Very little if any starch could have been removed in the preparation of this sample, certainly by no means a "large proportion." (9) Extra gluten biscuit, and said to contain no sugar and but a very small amount of starch—not over 10 per cent. This sample contained at least five times as much starch as should have been present according to the description under which it was sold. There was nearly twice as much protein in proportion to carbohydrate as in ordinary breadstuffs, but it still contained 2.6 times as much carbohydrates as proteid. (10) A perfect food for diabetes, dyspepsia, and obesity. This food contains as much starch and nearly as much carbohydrate as the whole wheat flour purchased at the same time and analyzed by the same methods. It is considerably richer in proein, but must certainly be regarded as very far from a satisfactory gluten food. (11) Gluten biscuit, also diabetic gluten biscuit. This sample, the best of those examined, contains twice as much carbohydrate as protein, whereas the British products examined by Fielden contained only about one-tenth as much carbohydrate as protein.—*Phil. Med. Jour.*

TYPHOID FEVER AT THE ROYAL VICTORIA HOSPITAL.—Prof. Stewart (*British Medical Journal*, 1901, i. 1463) reports the results of the treatment of 620 cases of typhoid fever occurring during seven years ending December 31, 1900. The mortality for these years was 5.4 per cent. The comparison of the annual percentages of mortality based upon from 72 to 126 cases a year is a striking demonstration of the uselessness of any attempt to draw conclusions as to treatment in such a malady as typhoid fever from anything but really large numbers of cases. These percentages vary from 0 to 9.3. In 10 per cent. of the cases the onset was associated with rigors or chills during the first week; 32.25

per cent. of the deaths occurred from perforation; 29.41 from a general intoxication; 26.47 from hemorrhage.

Stewart makes the observation that "a simple (non-perforative) peritonitis is not an uncommon event in typhoid fever, and may clinically closely resemble a perforative peritonitis. Recently we have had such an experience." In this case, in which, however, the condition of the peritoneum is not described, an exploratory operation was made from which the patient made a good recovery.

While leucocytosis was a rule it was entirely absent in some instances of perforation. It may also be present in conditions the other symptoms of which simulate perforation. It is believed "that with pain and tenderness in the abdomen coming on suddenly during an attack of typhoid fever (and in absence of other definite complications) a distinct leucocytosis, even without other signs of perforation an exploratory operation is justified, even advisable, thereby obviating the dangers of a fatal issue from too great a delay.

In cases of hemorrhage the following measures are employed:

1. The patient is urged to keep as quiet as possible.
2. The foot of the bed is elevated.
3. Cold is applied to the abdomen by means of a Leiter aluminium coil.
4. Opium is given internally.
5. Food by the stomach is either greatly lessened or entirely stopped.

Neither ergot nor acetate of lead has been employed.

Seven cases of cholecystitis were met with; in one instance in which there was pericholecystitis as well the result was fatal.

Relapses occurred in 9 per cent. of the cases.

Of 370 cases the Widal test was positive in all but 8. In 3 of the latter cases the course of the disease was very mild, terminating in the second week. In two instances the reaction was present as early as the third day; in 4 on the fourth day. Out of 96 cases the reaction was positive on the day of discharge in all but six. In 4 cases after a period of six months the reaction was positive with a dilution of 1.20, and in 7 the reaction was positive with the same dilution after a year; in 6 cases the reaction was positive after two years, and in 2 cases after three years. In 10 cases discharged a year previously reaction was negative. In 4 cases after two years and in 4 cases after three years it was also absent.

The striking case of typhoid fever without intestinal lesions, reported by Nichols and Keenan (*Montrac Medical Journal*, vol. xxvii., 9), is again discussed.

In all these hydrotherapy has been the routine treatment. The first bath is administered after a temperature cooled from 90 degrees to 80 degrees for ten minutes; the second at a temperature from 85 degrees to 75 degrees for a similar period, and the third at the same temperature for fifteen minutes; the fourth and subsequent baths are given at 80 degrees, quickly lowered to 70 degrees for a period of fifteen minutes. The usual precautions are taken as to friction, etc. The bath is repeated every third hour while the temperature remains above 102.4 degrees.

About 83 per cent. of the cases were bathed throughout the course of the disease. Of the 17 per cent. who were not bathed, some few were patients who rebelled against the treatment; in about 5 per cent. the temperature never reached the bathing point; in about 1 per cent. the reaction was so bad that the continuance of the treatment was deemed inadvisable, while a few cases admitted as late as the third week of the disease were not bathed. Severe abdominal complications, such as hemorrhage, perforation, cholecystitis, and intense nephritis, necessitated the discontinuance of the baths.—*Amer. Jour. Med. Sciences*, Nov. 1901.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

DEATH OF THE FOETUS BY TEARING OFF THE UMBILICAL VESSELS.—A woman 25 years old expelled a foetus six months old in the unruptured membranes and separated from the placenta.

The child was discolored, exsanguinous, died during labor from a hemorrhage, through tearing off the vessels.

This tearing was due: (1) To the shortness of the cord, being 30 centimetres long, rolled around the foetus neck; (2) To the disposition of the vessels of the cord, which were ramifying but on one side of the foetal face; (3) Due to the lesions of the pla-

centa and frailty of the vessels, which is probably the cause.—
(Jan. 23, 1901.)—*Medical Bulletin*.

TREATMENT OF ANTHRAX BY INJECTIONS OF PURE CARBOLIC ACID.—Louis H. Mutschler reports (*Annals of Surgery*, Oct. 1901) two cases of facial anthrax successfully treated by injections of carbolic acid. Twenty-five minims of 95 per cent. carbolic acid were injected about the periphery of the ulcer, the needle being introduced at eight different points. A wet bichloride dressing was applied hot and the treatment repeated the next day. The injection is followed by some pain which is soon followed by anesthesia. No ill effects were noted. The sloughs separated in sixteen days and three weeks respectively.

The doctor says that these cases, together with three others unreported, of which he knows, make, with four cases reported by Dr. Jopson, a total of nine cases occurring in Philadelphia within two years. He thinks it likely that others have occurred of which nothing is known. Most of the cases have been traced to direct importation and the doctor announces his intention of calling the attention of the department of agriculture to the matter with a view of establishing some form of disinfection on the class of products most liable to convey the disease.

SYMPHYSIOTOMY AS CONTRASTED WITH SECTION.—Dr. Charles Jewett, of New York, read a paper (Am. Gynecol. Soc.) on "The Place of Symphysiotomy as Contrasted with Section."

He presented the following conclusions:

1. Symphysiotomy is still a useful operation within a very limited range of pelvic contraction.
2. It is suited to conditions in which only very little additional pelvic space is required for delivery.
3. It is a valuable recourse, therefore, in cases in which forceps unexpectedly proves inadequate.
4. Axis-traction forceps, with the aid of posture, should always be tried before resort to symphysiotomy.
5. Its results would be much improved by restricting it to pelves with a conjugate of not less than 7.5 cm., three inches.
6. Under equally favorably conditions its total mortality should be no greater than that of Caesarean section.

7. When the pelvic space permits, it should replace Caesarean section in the presence of exhaustion.

8. It may be elected primarily as an alternative of Caesarean section, when the operator can be assured that the degree of obstruction is well within its safe limit. Here the choice of operation is largely a matter of individual preference.

9. Within its proper field symphysiotomy is better than Caesarean section for an operator of little experience in abdominal surgery.—*Annals of Gynecol and Pediatrics*.

REFLECTED PAIN IN APPENDICITIS.—By H. S. Lott, M. D., Salem, N. C., (*The Carolina Med. Journal*): "Pain in appendicitis is a most valuable symptom; always present, and one upon which we may, in many cases, largely depend.

In the absence of any localized mass to be defined through the abdominal wall, determining as to whether the patient has a simple "colic" or a more serious trouble involving the appendix, becomes at times quite difficult; and it is the reflected pain, which, in addition to other symptoms, is most valuable as an aid to early diagnosis.

In a number of cases coming under my observation, and in a majority of which the diagnosis was confirmed by operation, pain was complained of at two points, viz: Over the region of the appendix, and in the "pit of the stomach," or just below the ensiform cartilage, and often being most marked at the latter point.

Now, in order to determine the point of origin of the pain, or the focus of inflammation, make firm, gentle pressure, first over the region of the appendix, and then just below the ensiform cartilage. Do this repeatedly, noting closely, at each pressure, its effect upon the patient, who will forewarn you that there is pain at both points; but, if the case is one of appendicitis, pressure in the "pit of the stomach" or just below the ensiform cartilage, gives no pain; whereas, pressure over the region of the appendix, or at the focus of inflammation, increases the pain at this point, and also the reflected pain, just below the ensiform cartilage.—*Med-Progress*, Oct., 1901.

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

ATROPINE NOT INDICATED IN ALL CASES OF TRACHOMA.—Dr. J. H. Claiborne (*Medical Record*, Oct. 26,) says that he always uses atropine in those cases of Trachoma in which there is the slightest suspicion of iritis, but that in the majority of cases of trachoma there is no occasion for the use of atropine, and in his opinion its use would very materially retard recovery.

THE EYE SYMPTOMS OF TABES DORSALIS.—C. J. Swan, in *Clinique*, says:: When there is paralysis or paresis of any of the intrinsic or extrinsic muscles of the eye or muscles of the lids. think of tabes. When there is primary atrophy of the optic nerve, think of tabes. When there are noninflammatory pupillary changes, think of tabes.—*Charlotte Med. Jour.*

EARLY OPERATION IN MASTOIDITIS.—Dr. Dench (*New York Medical Journal*, Oct. 19,) says that an exploratory incision upon the mastoid in doubtful cases is perfectly justifiable, and that he believes that whenever there is an inflammation within the mastoid cells sufficiently severe to cause fluctuating postaural swelling, operative intervention is invariably indicated and spontaneous recovery is absolutely impossible.

PILOCARPINE IN THE TREATMENT OF CROUP.—Dr. S. E. Wertman, in *American Medicine*, recommends the hypodermic administration of pilocarpine hydrochlorate in the treatment of croup. Children between three and four years of age are given doses of 1-32 of a grain. Five cases are reported in which the treatment worked miraculously.

(It is well to remember that pilocarpine is a heart depressant and that extreme caution should be used in administering it to any

patient, young or old. In all instances its depressing effects should be anticipated by giving in connection with it a stimulant such as strychnine or whiskey.—Ed.)

CONJUNCTIVITIS FROM X-RAYS.—Dr. J. W. Sherer, (*New York Medical Journal*, Sept. 21), reports a case of conjunctivitis attended with photophobia, slight impairment of vision, eye fatigue, and moderate injection of the retinal vessels due to the action of x-rays. After the lapse of several months all unfavorable symptoms had entirely disappeared. No special treatment was employed.

ACUTE FOLLICULAR TONSILITIS: COMPLICATING THE COURSE OF TRUE DIPHTHERIA.—Dr. W. P. Munn, in *American Medicine* of Sept. 7th, reports a case of true diphtheria, the diagnosis having been verified by bacteriologic examination, which was complicated by the occurrence of a typical follicular inflammation of the tonsil opposite the one which had passed through the manifestation of diphtheria with the formation of the characteristic membrane.

The case illustrates the fact that two infections can co-exist in the throats of children, making diagnosis difficult.

NO EFFORT TO PREVENT CATARACTS IN INDIA.—Commenting upon the astounding fact that three Ophthalmologists in India have within the last few years operated upon 25,000 cataracts, the editor of *American Medicine* says that the report only proves the vicious trend of ophthalmology towards sole interest in operations. There is no hint in the report that there is an ounce of prevention, or that it is worth many pounds of cure.

The relief of eye strain largely prevents all inflammatory diseases of the eye, and those resulting in conditions making an operation necessary. Evidently there has been no attempt to relieve eye strain in India, or the report of 25,000 cataract operations by two or three men would not be possible, if in keeping with the truth.

MUSCULAR SPASM WITHOUT LOSS OF VITREOUS, FOLLOWING CATARACT EXTRACTION.—Dr. A. B. Gloninger, in *American Medi-*

cine of August 10th, reports a case in which a man aged sixty was operated for senile cataract, the combined operation being performed, and who three hours after the operation developed epileptiform convulsions, tetanoid in character, and was found in a position of opisthotonos. The patient was entirely unconscious and would have thrown himself upon the floor if the nurse had not been at the bedside. It was necessary to apply restraining bandages to keep him in bed. The spasm lasted one-half hour and he remained in the opisthotonos condition for fully two hours. There was a slight recurrence on the following morning. When the dressings were removed on the fourth day the wound was found sealed, and the eye none the worse for the strain to which it had been subjected.

TONSILITIS FROM 9H5 STANDPOINT OF THE GENERAL PRACTITIONER.—A. L. Gray states that the differentiation of acute tonsillitis from diphtheria in the early stages is not always possible without bacteriological examination. The forms of follicular tonsillitis have been found in infancy and old age and in both sexes. There are often patches over the tonsils and adjacent parts which closely resemble those of diphtheria, but which are due to streptococcus infection. Milky-white membranous appearances are sometimes found due to the leptothrix buccalis or the oidium albicans. When ulcers are present, they are often covered with a dirty yellowish or grayish necrotic tissue which may be firmly adherent for several days, resembling the diphtheritic membrane. Whenever there is a possible doubt in a case, bacteriological examination should be made at the earliest possible moment. Gray believes that follicular tonsillitis will be found due to a specific bacterium, and thinks that isolation of the patients should be practiced.—*The Virginia Medical Semi-Monthly*.

USE AND ABUSE OF NASAL SPRAYS.—In an article upon this subject in the *St. Louis Courier-Medicine*, Dr. Dunbar Roy says that nasal sprays have no place in cleansing purposes in acute inflammation, but find their chief use in chronic conditions, where there is an abundance of mucous or mucopurulent discharge.

Aside from the abuse of sprays in acute inflammation he believes that another abuse is the frequency with which all sprays are used in all affections, and the unnecessary and harmful amount of force employed. The author considers a compression of 15

pounds a sufficient one, and condemns the universal use of menthol spray for nearly all inflammatory conditions of the nose and throat. He has found a benzoinated oily menstrum or one with a few drops of terebene by far the best, but advocates even its cautious use. He considers most of the local applications recommended in the treatment of intra-nasal inflammations as irritating and likely to increase rather than diminish the amount of inflammation.

THE USE OF COPPER SULPHATE IN AFFECTIONS OF THE CORNEA AND OF THE LID OTHER THAN TRACHOMA.—J. H. Claiborne (*Medical Record*, July 27, 1901) says that sulphate of copper in the form of the solid stick is indicated:

In all acute attacks of inflammation of the cornea in which there is thickening, with a succulent velvety appearance of the upper lid.

In all recurrent attacks of superficial keratitis in which the same condition of the upper lid prevails.

In infiltrations of the cornea which are the result of preceding inflammations, associated with the same condition of the upper lid.

In maculae of the cornea in children and adults which have occurred a reasonable time after an inflammation, whether the upper lid presents the characteristic appearance or not.

In chronic conjunctivitis attended by thickening of the lid associated with blepharitis.

In chronic dacryocystitis (particularly in those cases in which the canaliculus has been slit) attended by chronic conjunctivitis.

(The treatment recommended above is barbarous. We have used it but long since discarded it for treatment more humane and just as efficacious. Bluestone should have no place in the office of any physician who has a spark of sympathy for his patient.—Ed.)

IRIDECTOMY IN GLAUCOMA.—The following is part of a letter received from Dr. George J. Bull, of Paris: "During the debate before the French Congress of Ophthalmology, in May, on De-Wecker's report on the value of iridectomy in glaucoma, Dr. Emile Javal, now totally blind in both eyes from glaucoma, was led into the room by a servant and took one of the front seats. One

speaker after another expressed his opinion on the subject, only to show that little is known with certainty and that we have to do with a disease which is far from being properly understood. At length Javal was called on to speak, and, not rising, as did the other speakers, he turned in his chair towards the centre of the room and began his remarks in a low tone. The men in the farther parts of the room stood up and came nearer, the better to see Javal and to hear him, and presently all were standing except the speaker and those in the few seats around him. It was a dramatic scene, not to be forgotten; the sightless speaker, eyes covered with dark blue spectacles, his neck scarred from an operation to excise the sympathetic ganglion, a wounded soldier, indeed, and the older men in the group around him, with the younger men beyond, bending forward the better to hear the soldier's story. From time to time Javal ceased to speak, but no one broke the silence, for it was seen that he was reading with his fingers the notes he held on the table.

"And yet no one has brought us the solution of the problem."
—*Ophthalmic Record*.

DANGEROUS HEMMORRHAGE AFTER REMOVAL OF ENLARGED TONSILS AND ADENOIDS, WITH A REPORT OF THE CASE.—Dr. A. C. Getchell, in the *Journal of the American Medical Association* of Oct. 5th, reports a case in which a frail and delicate looking child of five years was operated upon for enlarged tonsils and adenoids under ether anesthesia, the operation being performed with tonsillotome and adenoid forceps and curette, which was followed by an alarming hemorrhage two hours later. For several hours the patient was partly unconscious, with pale skin and colorless lips, and rapid and weak pulse. Repeated subcutaneous injections of normal salt solution and administration of stimulating and tonic treatment resulted in a satisfactory recovery of the patient. The operation had been performed in the usual manner, all due precautions having been followed, and the little patient had the advantage of attendance in a thoroughly well equipped hospital.

Concluding the report, Dr. Getchell says that he is now convinced that under the age of five years one should do the complete operation for removal of tonsils and adenoids with a great deal of caution; and where the tonsils are very large, and the child is delicate and anemic, the complete operation under ether should not

be attempted. The tonsils can and should be removed, but this can be done with no anesthesia or with a few whiffs of chloroform. The incompleteness of the operation should be explained to the parents, and the removal of the adenoid growth under an anesthetic should be considered and planned. After the gain in health that usually follows the removal of the tonsils, this becomes a much less dangerous proceeding.

Much has been said with reference to the apprehension of hemorrhage following operations of this character, by the careful selection of instruments and methods of operating. Dr. Getchell believes that it is not so much in the selection of instruments and methods as in careful observation of the patient, and the selection of the proper time and conditions for the operation.

ROOSA ON PARACENTESIS AND MASTOID OPERATIONS.—In discussing a paper upon indications for operation of the mastoid bone, (*The Post Graduate*, August, 1901,) Prof. Roosa, the noted aurist, has the following to say:

"I do not believe in a grippe case when you have suppuration, tenderness of the mastoid, and increased temperature, that paracentesis of the drum membrane is nearly so good as leeches or Wilde's incision through the mastoid down to the periosteum. I do not object to paracentesis when there is a good sound mastoid process and the drum head is actually bulging, but when there is not a sound mastoid process, all the cutting into the attic and emptying it will do no good, but, in my opinion, will aggravate the case very much. If you can avoid free incision of the membrana tympani or incisions of the mastoid by the practice of leeching and hot douching, do so. But if you do make paracentesis, make just enough to evacuate the pus, not the slashing cut that is sometimes advised. You know the anatomical arrangement, the drainage is very poor from the tympanum itself. My suggestion is that if the case has come to it, and the mastoid is involved, the drum membrane will be taken care of by nature, and that a so-called internal Wild's incision is very apt to aggravate the symptoms. I seek to avoid a paracentesis by leeching and the hot douche, for I think an untimely and unnecessary paracentesis is a dangerous thing leading to unnecessary infection of the ear.

"Now, as to the indications for operation in acute mastoid disease. Just as soon as the mastoid becomes tender, especially

if it is tender at the apex, markedly tender, just as soon as there is temperature that is varying or steadily increasing, and just as soon as there is the mastoid facies—a symptom you cannot mistake with any experience, just as soon as these symptoms are observed it is no good to the patient to temporize, to try this and to try that, but cutopen the bone down to the periosteum, and unless you meet solid bone don't delay one minute, and sometimes, even with solid and smooth bone, other indications lead you to go in. Almost all the cases we have, have been neglected, and further delay is positively dangerous. Remember also that in acute disease of the tympanum and middle ear among respectable people, people who are put to bed, where they have fever, kept in bed, and given every care—remember how much you can do for them, and do not begin, when you see an acute aural case, by going through the drum head, unless you are certain there is pus there, and you will be delighted to see what you can do. There is no department of surgery—and I speak with some surgical experience—and no department of medicine—and I speak with less experience—in which results are more satisfactory than in acute aural diseases, even in grippe.”

BOOK REVIEWS.

WARWICK OF THE KNOBS.—A story of Stringtown County, Kentucky. By Dr. John Uri Lloyd, author of *Etidorpha*; *Stringtown on the Pike*; *The Right Side of the Car*; Etc. 305 pages, with photographic illustrations. Cloth. \$1.50. Dodd, Mead & Co. New York. 1901.

This story first appeared as a serial in the "*Bookman*," and has but recently appeared in bound form. Those who are familiar with the strong characters and dramatic incidents which Dr. Lloyd presents in all his novels, would naturally expect an intensely interesting story in "*Warwick of the Knobs*," and are not disappointed.

The book is one of intense interest, and around the principal characters is woven a story of love, war, passion, and religion. That the work is one of the strong productions of the year is evi-

denced by the fact that 20,000 have already been sold. It appeals to all lovers of romantic fiction as well as to those who appreciate a literary production of merit. A. E. B.

DISEASES OF THE EAR, NOSE AND THROAT.—By Charles H. Burnett, M. D., E. Fletcher Ingals, M. D., and James E. Newcomb, M. D. Fully illustrated; 716 pages; Philadelphia and London. J. B. Lippincott Co. 1901.

The editor of this work has been Dr. Charles Henry Burnett, who announces that the close relation between the diseases of the ear, nose and throat rendered it desirable that there should be a conjoint text-book on these diseases and their treatment.

This work has, therefore, been divided into three parts, each written by a practical teacher especially familiar with the subject. The result has been the production of a work that while reasonably concise is yet thorough, and in accordance with the latest advances in the special branches of medicine and surgery considered.

The illustrations, particularly those that are colored, have been prepared with unusual care, and very materially add to the value of the work.

While the authors are without exception men of recognized ability and standing, whose views alone upon any subject would be accepted as conclusive, yet it is pleasing to note that opinions of recognized authors, other than their own, are given consideration, and frequently find place in the descriptive matter of the various subjects discussed.

The publisher has done his work well, the paper, type and binding being of excellent quality.

As a text-book the work must take precedence over anything we have seen which considers in one volume the three branches. The work, however, will find a place on the shelf of many specialists as well as general practitioners who desire a book of this character which presents the subjects in a concise, thorough and up-to-date manner. A. E. B.

DISEASES OF THE EYE.—For students and general practitioners. By Chas. H. May, M. D., Chief of Clinic and Instructor in Ophthalmology in the Eye Department, College of Physicians and Surgeons, Medical Department, Columbia Univers-

ity, New York. Second Edition, revised, with 408 pages. 275 original illustrations, including 36 colored figures. New York. Wm. Wood & Co. 1901.

The author announces in his preface that he endeavored to present a concise, practical and systematic manual of the diseases of the eye, intended for the student and general practitioner of medicine. That he has admirably succeeded is evident to any experienced student of ophthalmology who carefully examines the pages of this volume.

The work is sufficiently comprehensive, up-to-date, and yet of limited size, the latter feature being effected by omitting excessive detail and extensive discussions and lengthy accounts of theories and rare conditions.

The author frankly acknowledges that uncommon affections of interest chiefly to the specialist have been dismissed with a few lines; but that common diseases which the general practitioner is most frequently called upon to treat, have been described with comparative fullness.

The book is not recommended as a substitute for the larger works, but as a means of supplying a foundation to which further knowledge may be added by reference to larger and more exhaustive text-books.

The fact that the author has been warranted in putting out a second edition is proof that the value of the work has been recognized. The second edition differs from the first in that all of the more advanced ideas regarding the treatment of diseases, as accepted since the publication of the first edition, are given consideration.

The student will appreciate the large number of well executed illustrations and diagrams which make the reading matter much easier understood. He will also appreciate the careful manner in which the author has specified the strength of solutions, ointments, and other medicinal applications that are recommended in the treatment of the various ocular affections under discussion. The chapter devoted to formulae, with general considerations regarding operations and therapeutic measures, are valuable features along this line. The very complete index facilitates reference.

On the whole, the book is an excellent production and no student or general practitioner who possesses a copy need feel that they own anything but a book that is thoroughly up-to-date, prac-

tical and reasonably comprehensive even though the book has been prepared for undergraduate students. A. E. B.

INTERNATIONAL CLINICS.—A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Paediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other Topics of Interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Phil., U. S. A., with the collaboration of Jno. B. Murphy, M. D., of Chicago, Alexander D. Blackader, M. D., of Montreal, H. C. Wood, M. D., of Phila., L. M. Rotch, M. D., of Boston, E. Landolt, M. D., of Paris, Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Phila., J. W. Ballantyne, M. D., of Edinburgh, and John Herrold, M. D., of London, with regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Vol. II, Eleventh Series, 1901. Philadelphia. J. B. Lippencot Company. Price, cloth, \$2.00.

The opening article is by Turck, of Chicago, on "Treatment of Atony of the Stomach and Colon." A number of cases are reported and the treatment as advised by him detailed. Stress is laid on the importance of treating these conditions even in the presence of incurable lesions.

Tuffier makes a further report on Surgical Analgesia by Injections of Cocaine into the Spinal Column. He has made 252 operations under this form of analgesia and has lost no patient from the effects of the injection. He thinks the method not applicable to children nor hysterical patients and says the vomiting may seriously interfere in cases requiring difficult intra abdominal technique. He concludes by saying that he thinks the method will remain in practice by the side of local and general anesthesia.

Doteris follows with an article on the "Oxytotic Effect of the Lumbar Injection of Cocaine." He concludes that cocaine given in this way has a very decided oxytotic action.

Robert Jardnir contributes a paper upon "Saline Diuretic Infusions in the Treatment of Puerpural Eclampsia." The paper is based upon a personal experience of three years in private and hospital work. He says that since the introduction of this

method the mortality rate has been reduced in the Glasgow Maternity Hospital from 47 per cent. to 24 per cent. One drachm of acetate of soda is added to each pint of the normal salt solution. The injections are made under the breast or under the skin of the abdomen. Wlaeff, of St. Petersburg, contributes, perhaps, the most startling paper in the book on the "Treatment of Malignant Growths by Anticellular Serum." The serum is obtained from greese rendered immune by means of parasits in pure cultures obtained from human malignant growths. The results obtained are certainly encouraging.

A. Chauffard writes a good paper on the "Medical Treatment of Hepatic Colics." A. Broca writes on the "Conservative Treatment of Appendicitis" and attempts to prove the wisdom of his plan of waiting until the acute symptoms have subsided before removing the appendix. An article by Emil Slichting of the Dairy and Food Commission of Pennsylvania, concludes the department of therapeutics.

Among the half dozen good articles in the department of Medicine may be mentioned the one by Schamberg, of Philadelphia, on "Smallpox," as being particularly timely. The departments of Neurology, Surgery, Obstetrics and Gynecology, Pediatrics, Pathology, Diseases of the Eye, and Laryngology are well taken care of but our space forbids a review in detail. The volume closes with a list of some of the newer medical words with pronunciation and definition by W. A. Newman Dorland. We regard this as a very important feature of the work. The illustrations are good and the index satisfactory. Altogether the work is fully up to the high standard of its predecessors. M. F. P.

NOTES ON THE EYE.—For the use of Undergraduate Students. By Frank Laramore Henderson, M. D., Professor of Ophthalmology in the Barnes Medical College, St. Louis, Mo.; Ophthalmic Surgeon to St. Mary's Infirmary; the Centenary Hospital; and the Christian Orphans' Home; Consulting Oculist to the Wabash Railway and to the Terminal Railway Association; member of the American Medical Association; member of the Missouri State Medical Association; Vice President of the St. Louis Medical Society; and Secretary of the St. Louis Medical Library Association. Second Edition. 152

pages. Cloth, \$1.50. St. Louis, Mo. Nixon-Jones Printing Co. 1901.

The author gives as his reasons for preparing this book, the fact that most of the students' manuals on diseases of the eye are either exhaustive treatises or condensations of the entire science of ophthalmology. The result is that subjects which the general practitioner never attempts to master are given as much space as those with which he should be familiar.

The only claim for originality made for this work lies in its omissions. Minute anatomy, optics, the fitting of glasses, skiascopy, ophthalmoscopy, and kindred subjects have been left out intentionally, in the belief that they belong to postgraduate instruction. Those diseases which have to be diagnosed with the ophthalmoscope have also been slighted, for the reason that the author doubts the diagnostic value of the ophthalmoscope in the hands of the general practitioner.

The author frankly states that it is not his desire to minimize medical education, but rather to increase the useful knowledge of the graduate by selecting that which will be of the most service to him, at the same time giving him as much as the undergraduate student can reasonably be expected to learn in the limited time allotted to the eye in our medical schools.

The subject has been divided into 24 chapters or lessons, or one for each week of a six months' session. Nothing has been omitted that will tend to give the undergraduate a practical, and working knowledge of ophthalmology. The descriptions are uniformly accurate and condensed, yet sufficiently plain to be understood by the average medical student. The illustrations have been carefully selected with the view to increasing the ease with which the text is understood.

That the book has found a place among teachers of ophthalmology, who recognize the value of such a work in the teaching of such a broad subject as ophthalmology, is evident by the fact that this is the second edition placed upon the market. Except in the schools giving postgraduate courses in ophthalmology, the work will be found an essential adjunct in the teaching of diseases of the eye.

A. E. B.

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ORIGINAL ARTICLES.

No paper published or to be published elsewhere as original will be accepted in this department.

THE CLINICAL LABORATORY AS AN AID IN DIAGNOSIS.

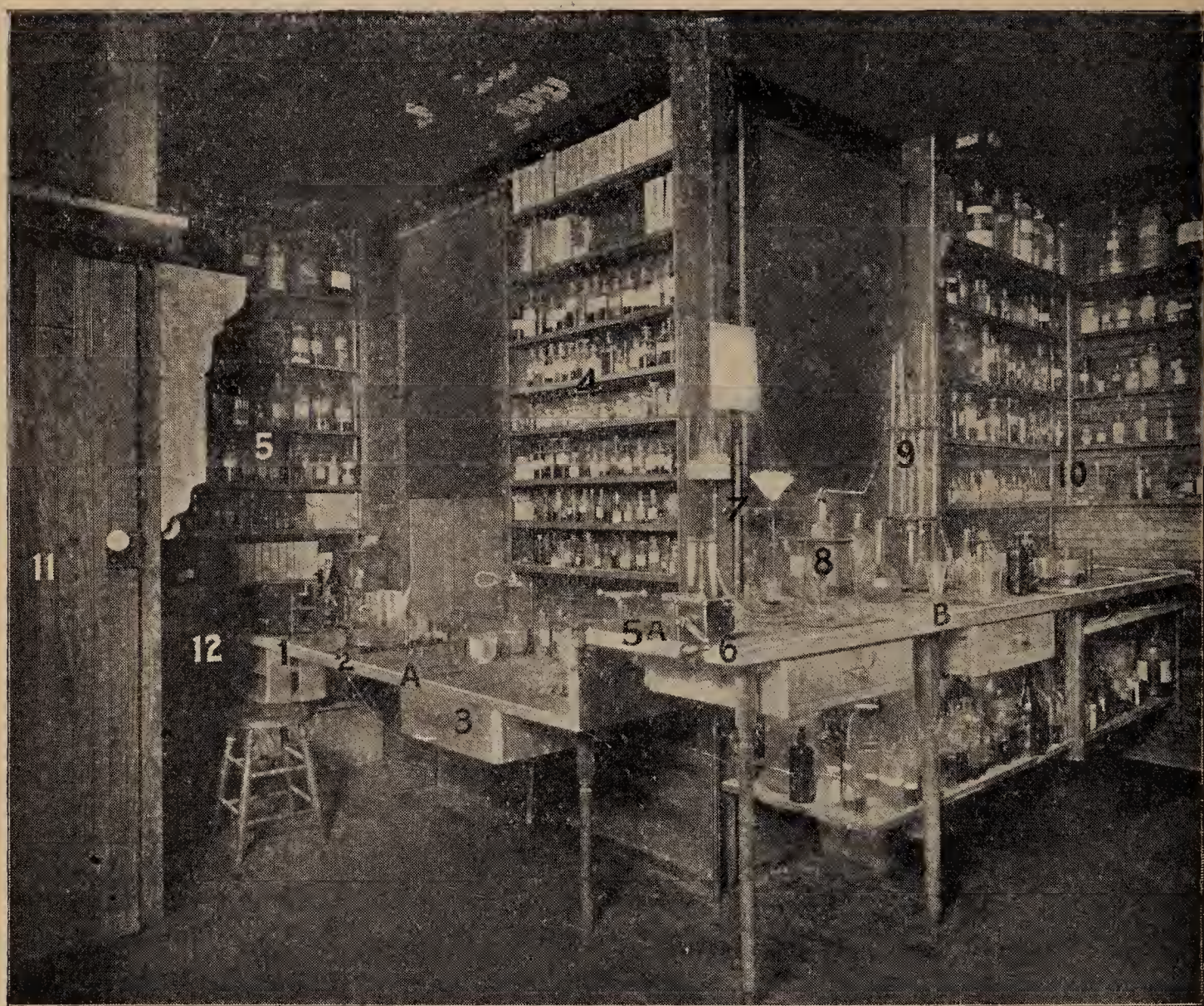
By GEORGE W. McCASKEY, A. M., M. D.,

Professor of Nervous Diseases and Clinical Medicine, in the Fort Wayne College of Medicine.

One of the notable tendencies, or rather inevitable results, of recent progress in internal medicine is the constantly increasing value assigned to laboratory methods as aids in diagnosis. To such an extent has this been emphasized that the term "clinical diagnosis" is used by Von Jaksch and others as synonymous with laboratory methods. Among the contributions of the current year which come to memory as I write may be mentioned those of Wyeth, Janeway, Wilson, Sayre, and Crozier Griffith. To urge the necessity of laboratory facilities and methods, not only in the field of original diagnosis, but as furnishing the most available test of practical results during the progress of treatment, would seem like carrying coal to Newcastle. They are so wantonly neglected, however, by a large number of physicians that the necessity for further emphasizing them, and pointing out their practical application in clinical medicine is quite apparent. To do this *in extenso* would be to write a volume, and I will attempt to do nothing more than

present a few salient facts, illustrated by views from my own private clinical laboratory, and, possibly, outlines of a few cases.

The most constantly worked, and, perhaps, on the whole, the most fertile field is that of examination of the urine. To a certain extent, generally too limited, this is done by practically every physician worthy the name. The tools with which he does it constitute the nucleus, or shall I say the nucleolus, of a clinical laboratory.



VIEW OF INTERIOR OF LABORATORY. Figure 1.

A—Microscope table. B—Table for chemical analysis. 1—Dissecting microscope. 2—Reichert's microscope accessories, etc. 4.—Staining reagents for microscopical work. 5.—Stock solutions for analytical work. 5A—Turn-table. 6—Centrifuge. 7—Filtering stand. 9—Revolving stand for burettes, and volumetric pipettes. 10—Working solutions for analytical processes. 11—Dark room for developing X-ray and other negatives.

The stereotyped routine is: reaction, specific gravity, and the presence or absence of sugar and albumen. Many are the errors which are prevalent, such for instance as excluding sugar because of a somewhat low specific gravity, ignoring the fact that im-

portant modifications of albumen fail to respond to the ordinary test, and excluding Bright's disease because of the absence of albumen at the time of a single examination.

These simple methods are quite insufficient beyond the diagnosis of diabetes and Bright's disease, and are in fact totally insufficient to exclude the latter. The functional capacity of the kidneys in most cases should be determined by quantitative methods to



VIEW OF INTERIOR OF LABORATORY. Figure 2.

1—Incubator. 2—Drying oven. 3—Culture media. 4—Laboratory reference books. 5—Analytical balance. 6—Spectroscope. 7—Chemicals.

Opposite table B in Fig 1 is another table not shown, with shelves containing a complete outfit of chemical glassware—flasks, volumetric flasks, beakers, graduates, etc.

determine the solids, and especially the urea in twenty-four hours. Again the latter is of little value unless we know something as to the quantity of ingested proteids. In the simple cases requiring only routine methods, the addition of the ureometer and microscope to the apparatus required for the tests already indicated would perhaps meet the requirements, but whenever graver conditions arise,

as indicated by resistance of morbid states to the usual methods of treatment, then if the highest interests of the patient are to be subserved, more complete methods become imperative.

Burettes, volumetric solutions, and a knowledge of titration is necessary to proceed further, and the information which the urine is capable of giving, with reference to metabolism, can only thus be obtained. Full information can be obtained from the various



ADDITIONAL LABORATORY ROOM. Figure 3.

Additional laboratory room adjoining Fig. 1 for work of a combined laboratory and therapeutic character, requiring the presence of the patient. 1—Complete outfit for clinical study of the blood. 2—Perimeter. 3—Appliances for stomach examination and treatment. 4 and 5—Various technical appliances connected for the most part with blood and stomach work. 6—Drawers containing stomach tubes and other gastric instruments.

standard works on urine analysis. If space permitted I could refer to the diazzo reactions found in typhoid fever, tuberculosis, etc., (I recently found it in a case of multiple arithritis, probably gonor-

rheal in character), the presence of an excess indican, skatol, and other ethereal sulphates (1), but I must pass on to other topics.

The examination of sputum, including buccal secretions is of the highest importance. Not only can tuberculosis be thus recognized in many cases, if it has unfortunately reached the stage of tubercular sputum, but various other acute and subacute infections can thus be determined. Cover glass preparations prop-



ELECTRIC AND X-RAY ROOM. Figure 4.

1—Static machine. 2—X-ray attachment. 3—Wall cabinet containing galvanic and Faradic apparatus. 4—Motor and Rheostat.

erly fixed and stained, or, in some cases cultures, should be made. In addition the examination of the fresh slide should not be neglected. Important histological findings may thus come to light—e. g. elastic fibers, epithelium, pus, etc.

In one case, which I saw in consultation, with an extremely fetid odor of the bronchial secretions, which were also tinged a

1. For a rapid determination of these substances see the author's paper in the *Four. of the Amer. Med. Ass'n*, March 31, 1900.

green color, the existence of circumscribed pulmonary gangrene was established by finding the *bacillus septicus ulceris gangrenosi* in the expectoration. The patient made a complete recovery.

The blood may next be referred to as furnishing one of the most fertile and practically valuable fields of laboratory investigation. In its simpler aspects, it requires but little time and not much apparatus. In my own laboratory the following routine is carried out: A puncture is made in the finger and two or three drops placed in Hammerschlags chloroform-benzole mixture at from 1055 to 1060 according as the appearance of the patient indicates anaemia or not. This I believe to be much more reliable than either the Gowers or Fleishman apparatus for the determination of hemoglobin. The two "red" and "white" tubes of the Thoma-Zeiss apparatus are next filled and laid aside for counting. The percentage tube of the hematocrit is then filled, and immediately placed in the centrifuge, and rapidly revolved by an assistant for about three minutes. While this is being done, I prepare a fresh slide, and several thin cover glass smears, the former of which I examine under the microscope at once, while the latter are allowed to dry in the open air for subsequent fixation and staining by various methods to bring out the histology of the cells for diagnostic purposes. There are other modifications to be made in special cases, but those indicated are quite sufficient for routine work. Such an examination gives information of the highest value, and is sometimes alone sufficient to positively establish a diagnosis.

The digestive organs may next demand attention. The use of both the stomach and colon tubes are essential to a complete diagnosis, if the symptoms point in the direction of either of these organs, and not rarely in obscure cases simply to aid in clearing up the diagnosis when no positive indications exist.

Referring first to the stomach, at least two distinct examinations ought to be made. First, an Ewald test breakfast should be given preferably six hours after a full meal, and removed in one hour, filtered, and the filtrate subjected to the usual chemical and physiological tests—the presence and percentage, if present, of free HCl, the percentage of the total acidity, and the action of the contained ferments on egg albumen, and milk being the most important, while the completeness of starch digestion is determined by the iodine test, and the stage of proteid transformation by the presence and intensity of the biuret reaction.

Second, the fasting stomach should be examined, preferably and almost necessarily in the morning, no food or fluid having been taken since the preceding evening. Mild aspiration should be made to secure fluid which the stomach may contain. I have thus obtained as much as six or eight ounces of fluid having all the qualities of a firstclass culture medium. This fluid should, of course, be examined chemically, but especiaally microscopically, as it will very probably contain important micro-organisms, and histological debris. If no fluid is found one or two pints of water should be introduced and siphoned off, and in this water will almost certainly be found important evidence of disease.

The contents of the colon also furnish important evidences of disease when submitted to suitable laboratory procedures. For the purpose of making such examinations I have suitable closets in connection with certain rooms in my office set apart for hydriatic and electric treatment, and for the local treatment of intestinal disease. After microscopical inspection selected portions are transferred to the laboratory and subjected to suitable examination. This would always include microscopical examinations, and, in certain cases, also chemical and spectroscopical examinations. By the first named procedure there may be found, for example, the ova of intestinal parasites, pus, blood, epithelium, fragments of neoplasms, pathological quantities of undigested fat, starch, granules, and muscle fibres, the latter being especially significant of pancreatic disease if the muscle nuclei are still distinct, etc., etc.

In making exhaustive studies of metabolism, the amount of nitrogen excreted by the bowels is estimated by the Kjeldahl process, which requires the use of the fume chamber.

With the spectroscope wattery infusions of fecal matter are examined for unaltered bile coloring matter, which is always pathological and points to disease of the small intestine.

The proper limits of this article, of course, preclude more than the briefest reference to a few of the most important questions ranging over the entire field of clinical laboratory investigation.

In conclusion I will only refer to the latest addition to the clinical laboratory in the form of the X-ray apparatus. While it is perhaps more widely applicable in surgical cases, yet I have found it of great value in internal diagnosis. Tubercular deposits, in the lungs, enlargement or displacement of the heart or liver, renal, cystic, or biliary calculi may be mentioned as among the diagnostic

achievements of the X-ray examinations in the domain of internal medicine, of course overlapping, as it always must, that of surgery. I use the static machine, not only because I believe it to be the best X-Ray apparatus, but because of its value as a therapeutic agent in the treatment of disease.

In order to convey fuller information to those who may possibly be unfamiliar with the practical details of such work, the following illustrations of the interior of my own clinical laboratory are presented. Of course each clinician, working along his own lines, and guided by experience and circumstances will evolve such a laboratory as appears to meet his requirements. The one here illustrated is therefore only suggestive, and has been gradually formed by the writer in his work as a consultant in internal medicine.

FUNCTIONAL HEADACHES.

BY DR. ELMER E. MORGAN,

Professor of Physical Diagnosis, in the Fort Wayne College of Medicine.

Headache is always a symptom and never a disease. It has many causes, the most common probably being that due to disordered digestion; next would come the headaches of eye-strain in its various forms. Nervous exhaustion or neurasthenia, either with or without anaemia, furnishes a large number of cases. Besides these three principal classes we have migraine; also the headache of rheumatism, which may be severe in character and accompanied by great tenderness of the scalp. Persons whose urine contains an excess of phosphates sometimes suffer from a dull pain in the head or scalp. Some drugs, such as chloral, nitroglycerine, the salicylates and quinine often produce headaches, as does also tobacco. These might all be termed functional headaches. There are others, not so frequent, but perhaps of greater importance, as the headaches of renal disease, brain tumor, meningitis, etc.

Headaches due to disordered digestion are nearly always accompanied by some symptoms of such disorder, as distress in the stomach, eructations of gas, hiccough, vomiting, or diarrhoea or constipation. There is very often a history of the ingestion of either indigestible or an excessive quantity of food or drink. Exposure to cold will sometimes cause a congestion of the abdominal viscera, resulting in a catarrhal condition of the stomach and bowels, which is followed by congestion of the liver, jaundice

and headache. The headache of disturbed digestion is usually frontal and in many cases accompanied by a flushed face, showing a hyperaemia of the face and probably of the brain, which is proven by the fact that the patient may be unable to lower his head without producing an aggravation of the symptoms. Such a headache would be relieved by the application of cold to the head and a hot foot bath, also by emptying the stomach, although the act of vomiting increases the congestion and also the pain for a short time.

The headache of disordered digestion does not, as a rule, come on immediately after the ingestion of food, as enough time must elapse to allow it to become a toxic substance by either fermentation or putrefactive action, thus converting the whole process into a toxemia or ptomain poisoning or it may by mechanical irritation of the stomach and bowel produce reflex disturbances of the circulation and nerves of the cranium sufficient to produce pain. Headaches of indigestion have two important characteristics. They are not constant, and are often relieved or prevented by a purgative, even when constipation is not present. They are often pulsating and likely to be accompanied by nausea.

Of the headaches of eye strain in its numerous forms I have little to say, except that it is usually due to abnormalities in the ocular muscles, and may be felt in any part of the head, but oftenest in the occipital region. If in connection with such a headache coming on soon after long use of the eyes, as in reading, there is blurred vision, with pain in the muscles of the eye, particularly upon moving the eyeball, and perhaps so me hyperaemia of the lids or conjunctivae, the diagnosis of headache from eyestrain is pretty sure to be correct, although the pain may result from strain due to astigmatism or irritable retina, or an iritis. These abnormalities can usually be overcome by properly fitted glasses.

The headaches of nervous exhaustion or neurasthenia may be deep or superficial—that is within the skull or apparently in the scalp. There is often some dizziness or vertigo with this sort of headache, and it is frequently occipital in character, but may be frontal. This headache is continuous, and relieved only by opiates or rest; but the pain is not so severe as some others.

One of the peculiarities of the headache of neurasthenia is that no matter how severe it is, when the patient goes to bed he sleeps—or, at least, the pain in his head does not keep him awake—unless

his trouble is complicated by some other disease such as migraine or neuralgia.

The headache of neurasthenia may easily be mistaken for hysteria when one considers its proneness to disappear before any mild excitement, only to appear again, perhaps in a different location, as soon as the patient has time to remember that he has had no pain for perhaps an hour or two.

In treating the headache of neurasthenia the cause should of course be removed if possible. This is a very large subject and I will not attempt to deal very exhaustively with it, but simply say rest, proper food and exercise, outdoor life and baths should form the foundation of such treatment. Palliative treatment might be made use of while you are awaiting results from the constitutional treatment, and for this I know of nothing better than the bromides in large doses—gr.xx to xl t. i. d.

The headache commonly called migraine is usually attended with nausea and perhaps vomiting, which has also led to the name of sick headache, gastric headache, and bilious headache. The pain is usually one-sided at first and hence has also been called hemicrania. It is often preceded by a disorder of vision or of hearing, which is always the same in the same individual but differs in different persons, the victim often knowing an hour before the attack begins that it is coming. The pain probably begins in the temple and spreads over the head and sometimes down the neck. It is deep-seated and more severe than most other headaches. It is different from neuralgia in that it is continuous and usually disables the patient during the attack. I do not know the cause of this disease, but it is not a neuralgia; is not due to disorder of digestion, although it may be accompanied by such disorder, as severe pain in any other part of the body may be accompanied by vomiting. It is not due to neurasthenia or a tired brain; neither is it due to a misplaced uterus or so-called ovarian irritation. It comes in distinct attacks, the intermissions being marked by entire freedom from pain; but the tendency is for the attacks to come oftener and last longer. It usually begins about the age of puberty and the patient may at first have only one or two attacks a year and of short duration, but the disease is quite likely to continue until the menopause in women, or about the age of 60 in men, unless relieved by treatment.

Dr. Hugh T. Patrick has summarized the cause and symptoms of migrain as follows:

1. Heredity, more often on the mother's side.
2. Inception, generally under 15, always under 20.
3. Attacks, at first two or three times a year to once a month; later, once in two months to two per week.
4. Duration of attack, six to thirty-six hours.
5. Freedom from pain in intervals.
6. Continuance of affection through many years.
7. Pain severe; nausea or vomiting rather frequent.
8. Prodromes not infrequent and nearly always the same for each individual.
9. Accompaniments of visual, sensory, or speech symptoms almost pathognomonic, but not often present.
10. During continuance does not admit of sleep.

Drugs as curative agents for this disease are not very successful, although they may give relief. The coal tar products, as anti-pyrine, acetanelid and phenacetin have gained some just credit for the relief afforded in this as in other pains. Nux vomica or its alkaloid, strychnine should be given alternately with the coal-tar products when the latter seem to be losing their effects.

Dr. Patrick prefers cannabis indica to all other drugs, claiming to have had wonderful results from it, his success depending, he says, on three factors—quality of preparations of the drug, difference in individual susceptibility, and substitution by druggists. Some preparations put on the market by reputable manufacturing pharmacists are worthless; one person may take many times as much of the drug as another. It is well to begin treatment with the minimum dose—say one or two drops of the fld. ext., and gradually increase until the physiological effects are noticed, then cut that dose in two and continue indefinitely.

In my own experience I have had good results in only one out of three cases in which this treatment was tried, the other two showing an idiosyncrasy for the drug after the first dose and refusing to continue the treatment. In connection with this or any other treatment, great attention must be given to the general health, the best of hygiene, especially of the nervous system should be insisted upon, and all abnormalities which may act as irritants removed.

SOME CASES OF BRAIN TRAUMATISM.*

BY DRS. EDWARD J. McOSCAR AND GEORGE W. McCASKEY,
Fort Wayne, Ind.

HISTORY OF CASES AND DISCUSSION OF SURGICAL TECHNIQUE, BY DR. McOSCAR.—Both the early and the remote effects of cranial injuries are so varied in character that the result in a given case may not be predicted with certainty. The statement of Pott that "no injury of the head is so slight as to be disregarded or so severe as to be dispaired of" is largely true.

It has probably been the lot of most practitioners at some time to have seen a head injury apparently so trivial as to scarcely be entitled to more than a passing thought, yet proved to be the beginning of a life of invalidism long drawn out, if not of the early death of the victim. On the other hand injuries so severe as to appear practically hopeless result in a reasonable recovery. Such was the celebrated crow bar case cited by the older writers in which an iron bar three feet seven in long, one and one-fourth inches in diameter and weighing 13 pounds was driven through the skull, entering near the angle of the jaw, passing under and behind the zygomatic arch and emerging through the frontal bone, having traversed the anterior lobe of the cerebrum and fractured the parietal, temporal, sphenoid and frontal bones. The patient recovered from a surgical view with his erstwhile bodily functions intact. He was completely changed in disposition, lived twelve years when epilepsy developed—death taking place during a paroxysm.

CASE.—On a previous occasion I reported a case before this society in which death occurred as a result of an injury to head sustained ten years previously. I saw the patient, a man 37 years of age, at 8 p. m., an hour after a severe convulsion had occurred. Patient was in deep coma, pupils contracted to pin points—both conditions possibly depending in some measure upon a hypodermic injection which had been administered by a physician hurriedly called during the seizure.

There was a depression in the frontal bone immediately to the left of the median line into which the integument was deeply umbilicated. This was the site of an injury received ten years previously by being struck with a piece of timber thrown from a buzz saw in which the patient was knocked down but got up without assis-

*Read before the Allen County Med. Soc., Tuesday evening, Nov. 26, 1901.

tance. The wound was dressed externally and the patient resumed work shortly after. During the years which followed, patient complained of head pain and was often obliged to quit work. For two or three years his wife stated that he had grown more and more irritable. For a few days preceeding the convulsion he had had severe head pain. Had never before had a convulsive seizure.

A pint or more of blood was taken from the arm, resulting in immediate dilatation of the pupils and restored consciousness to the point of answering questions in mono-syllables—protruding the tongue, etc.

The following morning consciousness was complete with all the symptoms in evidence of an active meningitis.

The following morning patient walked into the yard, returned to his bed, became comotose and died the same night.

Autopsy 30 hours after death—Diffuse purulent meningitis involving the dura and pia arachnoid dipping into practically all the convolutions of the brain—old occlusion of the superior longitudinal sinus and adhesions of the dura about the site of fracture.

CASE TWO.—June 1st, 1901. A man of apparent good health, 48 years of age, fell between cars while attempting to board a train at Kendallville, resulting in numerous bodily injuries, principal among which was a fracture of frontal bone and nasal sinuses. Patient was seen in St. Joseph Hospital, 8 hours after receipt of injury. Was and had been unconscious from the time of injury—restless and required restraint on account of his tossing about. Right pupil slightly dilated and both responded sluggishly. The depressed fragments of bone were elevated under ether. Pupils were equalized as a result and the patient was able to give his name and address after effects of ether had passed off. Morning of June 3rd, patient comotose, wound enlarged and bone fragments and blood clot removed. With return of consciousness was able to recognize his daughter and gave a creditable account of his past previous to the injury. During the next seven days patient was under the care of Dr. E. A. Crull, during my absence from the city. Patient lapsed into a semi-conscious state and presented little variation from day to day. On June 20th, Dr. G. W. McCaskey saw the case and carefully investigated it during the next few weeks. The patient became greatly emaciated and dragged slowly to his death July 19th, seven weeks after the injury.

CASE THREE.—On October 29th, 1901, a man 36 years of age,

long addicted to the use of alcohol was, while under the influence of drink, thrown from a carriage to the curb. He was driven to his home where he walked into the house and was put to bed. During the night and the following forenoon he made several trips to the bath room and went down stairs and back to his room unassisted. At 2 p. m. on the day following the injury I saw the patient just after his having had a violent convulsion. There was a contused and abraded area in center of forehead from which the swelling extended to surrounding tissues with complete ecchymosis of the tissues of both orbits. Pupils were contracted, responded sluggishly and seemed to exhibit a slight variation in size. This the family thought was the usual condition in health. A second convulsion occurred at 4:30 and a third at 9:30 p. m. There were no symptoms pointing to any local lesion with the possible exception of the pupils as noted. The convulsions were general in character and suggested no defined area of brain irritation. The patient was in a somewhat dazed mental state—insisted on getting up and required restraint.

At 5 a. m. on the second day after the injury a severe convulsion occurred, being the fourth in 15 hours. Dr. G. W. McCaskey saw the case with me just after the third convulsive seizure and during the remaining period made careful and painstaking investigation including bacteriological examination of the blood and cerebrospinal fluid. The case presented little variation in symptoms until the 6th day when death occurred after a period of coma with a temperature above 107 Fahren.

Among the more or less remote results of head injuries impaired mental function is prominent. It is estimated (Kiernan) that 2 per cent. of all cases of insanity have been caused by traumatisms. This may be the result of cerebral concussion with more or less injury to the cortex. Perversion of nutrition in local areas with subsequent organic change, the induction of mental shock or as Clevenger has suggested "An alteration of the chemistry of nerve cells unattended with any demonstrable lesion may be causative factors.

Spitska points out a group of symptoms which implies an evolution of a traumatic neurosis—evidenced by change of character, immorality and an array of moods which might come under the term of general crazedness. It is evident that surgery offers but little by way of relief to the majority of cases growing out of the

above named conditions as the evidence of accessible local lesions are wanting. Cases having their origin in skull fracture with depression—pressure from blood clot, tumor or exostosis, thickening of the membranes with adhesions should all have the benefit of surgical interference when once the lesion has been located. This class of cases present a hopeful future under proper surgical treatment.

In all recent injuries to the skull and brain there should be clear indications calling for surgical procedure before operation upon the skull is attempted.

Fracture of the skull does not necessarily call for the use of the trephine. Unless there be evidence of intracranial pressure a recent fracture should be left undisturbed. Depressed bone, spicules resting on or penetrating the brain or its membranes and blood clot should be removed. Hemorrhages or accumulation of pus, the first when showing evidence of pressure, the latter whenever probably existing calls for early opening of the skull and removal of the offending material. In a diffuse purulent meningitis efficient drainage is practicably impossible, the pus being enveloped in the inaccessible folds of the pia-arachnoid with invasion of the sinuses and brain cavities. Under such conditions surgery can do no harm but little else can be said in support of its intervention.

It would seem needless to mention that operations on the skull and its contents should conform to the laws of perfect asepsis.

DIAGNOSIS BY DR. McCASKEY.

Through the courtesy of Dr. McOscar I saw the second and third cases reported above, and made a thorough clinical investigation for diagnostic purposes.

Case 2nd was seen about three weeks and case 3rd about one day after the injury. In both consciousness was partially submerged, but much more so in case second. In both, although the symptoms pointed to a serious disturbance of the brain function following traumatism, a most thorough examination from a neurological point of view failed to reveal a single local symptom, or in any way point to a localized lesion which might be attacked by surgical methods.

In case third there was an injury of one kidney, (just which could not be determined, and under the circumstances was not ma-

terial) as indicated by hematuria and tubular blood casts. This of course suggested "uraemia," but the quantity of urine was ample and contained two per cent. of urea, and over four per cent. of total solids, thus establishing the functional integrity of the kidneys, and fairly eliminating this factor in diagnosis.

The leucocytes numbered 3,500 in case second, and 13,000 in case third, the low count in case second being due to the long continued toxæmia, having destroyed the reactionary power of the organism.

A careful consideration of all the facts seemed to point by exclusion to the toxic character of the symptoms, and, with a view of securing evidence along this line for diagnostic purposes, I made a lumbar puncture in each case under strictly aseptic conditions. The needle and syringe were thoroughly disinfected in a steam sterilizer, and the skin over the second lumbar space thoroughly cleansed. A small quantity of cerebro-spinal fluid was obtained and transferred to a flask of sterilized peptone solution at the bedside. Later, from the residuum of the fluid in the sterilized syringe, stab cultures were made in flesh peptone gelatine tubes, and cover glasses prepared, fixed, stained, and mounted for microscopical examination. These mounted slides from the fresh cerebro-spinal fluid showed from one to half a dozen diplococci in nearly every field. They resembled morphologically the diplococcus lanceolatus, and were proven by culture methods to be that organism.

In addition to the lumbar puncture, a bacteriological examination of the blood was made with positive results. The precautions taken were as perfect as possible. The needle and syringe were thoroughly sterilized, and the skin carefully cleansed over the median basilic vein. The latter was distended by compression of the proximal course, and the needle plunged directly into the caliber of the vein, and two c. c. of blood withdrawn. This was immediately emptied into about 200 c. c. of flesh peptone solution, sterilized in the usual manner, and allowed to stand several days at a temperature favorable for growth, in order to demonstrate its sterility.

The organism stained by the Gram method, grew in gelatine without producing gas or liquifying the medium; on the surface of blood serum, it grew in somewhat characteristic colonies of isolated points, and slides made from this growth showed well defined capsules which were not seen in the other culture. It was also grown

in a rosolic-acid peptone solution in which the production of acid by the growth was demonstrated. The bacterial diagnosis was thus entirely conclusive.

There can be no doubt that the clinical picture presented in these cases was the result of a general systemic infection, involving the central canal of the cerebro-spinal system.

SOCIETY PROCEEDINGS.

ALLEN COUNTY MEDICAL SOCIETY.

At a regular meeting of the Allen County Medical Society, held in the assembly room of the court house on Tuesday evening, Nov. 12, Dr. Elmer E. Morgan read a paper on Functional Headaches. (This paper appears in full in this number of THE JOURNAL-MAGAZINE.) In the general discussion which followed, attention was called to the diagnostic features of headache—the character of the pain, and the location of the pain in the head to a large extent indicating the seat of the diseased process producing the trouble. The general opinion expressed regarding treatment was that effectual treatment must of necessity be directed to the cause of the trouble. Headache in itself is considered but a symptom.

The report of a case of brain tumor, with operation and recovery, was presented by Dr. G. W. McCaskey, and Dr. Miles F. Porter. The principal complaint in this case was weakness and pain in the left leg, heart trouble and general nervousness with “awful pains” in the head. A thorough examination by Dr. McCaskey showed a complication of diseases. There was a severe chronic gastro-enteritis, which was a legacy of typhoid fever occurring ten years previously. With this was a chronic toxæmia, gastric motor insufficiency, with marked atrophy of the gastric glands. The combination of partial anesthesia, motor weakness, and electrical reaction of degeneration left no doubt of the existence of peripheral neuritis in the left leg, probably of toxic origin. The co-existence of motor weakness of left arm, without sensory or electric disturbance, with slight paresis of left side of the face, proved the existence of a central lesion which was diagnosed as a brain tumor

of toxic origin. An operation was advised and done by Dr. Porter.

The tumor was a gliosarcoma, and was found to be sub-cortical, and was easily removed, the patient making an uneventful recovery. The use of the leg was entirely recovered, and the head pains disappeared as a result of the operation.

At a regular meeting of the Allen County Medical Society held on Tuesday evening, Nov. 26, Dr. W. P. Whery read a very interesting paper upon the Vaso-Motor Nerves. Dr. Whery said that "The sympathetic nerves—and, especially the vaso-motors—are stimulated by emotions or appetites, whether these be conscious or not. While some emotional stimuli proceed from the intellect, the greater number of them originate otherwise. And while emotions stimulate the vaso-motors, the unconscious stimulation of these nerves often, in turn, creates emotions. And as the character of every individual depends mainly upon his emotional nature, it may be said to be due to the functional efficiency of his vaso-motor nerves.

Drs. G. W. McCaskey and E. J. McOscar presented a report of cases of Brain Traumatisms, and illustrating the diagnostic value of lumbar puncture. (This paper appears in full in this number of THE JOURNAL-MAGAZINE.)

The annual meeting of the Allen County Medical Society will be held on Monday evening, Dec. 23. In accordance with the usual custom, the Society will have an address from a physician out of the city, and we are informed that an invitation has been extended to Dr. J. B. Murphy, of Chicago, to present the principal paper of the evening, and that he has accepted, giving as the title of his address, "Surgery of the Biliary Tracts." The annual election of officers will precede the scientific session, and following Dr. Murphy's address, the members and invited guests will repair to the Aveline hotel, where the annual banquet will be held.

THE FORT WAYNE ACADEMY OF MEDICINE.

The Fort Wayne Academy of Medicine, held its first regular meeting at the office of Dr. Lomas, Tuesday evening, Nov. 5th, 1900.

The Executive Committee presented a constitution for the Society which was read and adopted. The President, Dr. Lomas, then read an address on "The Progress of Medicine in the XIX Century," which was very entertaining, and ought to be a stimulus to all present for thorough scientific work in this advanced age.

After the program of the evening, the Society was served with a delicious luncheon by the President and his wife.

After toasting the hostess and the welfare of the Society, the meeting adjourned.

The second regular meeting of the Fort Wayne Academy of Medicine was held at the office of Dr. W. E. Stemen, Tuesday, Nov. 19. Owing to the resignation of Secretary Wermuth, on account of ill health, Dr. C. Dancer was elected Secretary. A committee was appointed to wait on Dr. Wermuth, and express to him the sympathy and good wishes of the Academy, and the hope of his speedy return to health.

Dr. Bock read an interesting paper on "Chorea," in which he spoke of this disease as a functional derangement of motor areas of the cortex, frontal lobes, and basal ganglion, and that the primary cause of this functional derangement was always to be looked for, the most common being bacterian toxæmia. In regard to pathology there is probably no organic lesion in the motor areas, and none can be found at autopsy, either microscopically or macroscopically. He thinks there is usually a predisposition, or a weak nervous system, a common foundation being rheumatic tendencies. The diagnosis of Chorea is easy and depends on three important factors: first, the involuntary but conscious muscular movement; second, age, five to fifteen; third, the slight constitutional disturbance compared with that of intercranial inflammations. He reported a case of a girl, six years old, who has been slowly improving under tonic doses of Fowlers sol. and rest in bed. He says that it was two weeks before any improvement occurred.

In the discussion Dr. Wallace spoke of a case which was accompanied by a "throat cough." Dr. Rhamy spoke of several cases in which gastro-intestinal diseases and eye strain were the prime factors, and thought that any irritation of the unbalanced nervous system of a child at puberty might be an etiologic factor. Dr. Lomas spoke of arsenic in large doses. Dr. Ranke spoke of the eye strain and nervous cough.

Dr. Dancer read a paper on "Smallpox," which proved to be a work of merit, and showed a large amount of careful investigation by the author. It was discussed by Drs. Leslie, Stemen, Hammond, Bock, Wallace, McBeth, King, Rhamy and Lomas. By unanimous vote this paper was referred to the Allen County Medical Society.

The Fort Wayne Academy of Medicine held its regular meeting Tuesday evening, Dec. 4th, at the office of Dr. McBeth. A committee was appointed to prepare resolutions on the death of Dr. Wermuth.

Dr. King read a paper on scarlet fever, which entered into the symptomatology and treatment of the disease. An interesting discussion followed in which was brought out the fact of the discovery of the diplococcus of scarlatina by Dr. W. J. Class, medical inspector Chicago Health Department, and reported by him September 2nd, 1899, in the *Journal of the A. M. A.* The opinion was expressed that cases of scarlatina should be quarantined until desquamation is complete.

Dr. Leslie reported a case of ulcerative skin disease which he believed to be trophic.

PROPOSED FRENCH LAW TO BAR CORSETS.—Dr. Philippe Marechale is making every effort to have a bill introduced into the French chamber, placing the corset manufacturers under state control. It is asserted that 25 per cent. of young women who wear corsets die of pulmonary diseases, 15 per cent. suffer from organic derangement throughout their entire life, while only 30 per cent retain their health.

Under the provisions of the bill proposed by Dr. Marechale, women below 30 years of age are forbidden to wear any kind of corsets under the penalty of three months' imprisonment and a fine of not more than 1,000 francs. Women over 30 years of age are permitted to wear corsets without being subject to legal punishment. A last provision compels manufacturers of corsets to give to the state officials the names and addresses of all purchasers of their goods. It renders dealers in corsets liable to short terms of imprisonment if they sell corsets to women about to become mothers. It also provides for the confiscation of their entire stock. Should they be guilty of a second offense it forbids their continuing business.

Fort Wayne Medical Journal-Magazine

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EDITORIALS.

THE JOURNAL-MAGAZINE SPECIAL OFFER.

For every one dollar sent us as a new subscription, or as a renewal subscription to the Journal-Magazine, between the first of September and the first of January, 1902, we will send for one year, to any address, the *Cosmopolitan Magazine*, the net price for which is one dollar and the *Fort Wayne Medical Journal-Magazine*, the net price for which is also one dollar. Let us have your subscriptions before this offer expires.

THE FORT WAYNE ACADEMY OF MEDICINE.

In the November issue of THE JOURNAL-MAGAZINE we mentioned the fact that a new medical society had been organized in the city of Fort Wayne, to be known as the Fort Wayne Academy of Medicine. Since the publication of this news item we have been favored with detailed information regarding the aims and objects of the new society.

It seems that there has long existed among some of the younger members of the medical fraternity in the city of Fort Wayne, a feeling that they were not given sufficient opportunity for being what they are supposed to be, active and working members of the Allen County Medical Society. As one of the younger men in-

formed the writer, they have felt that the older and more experienced medical men read all the papers, and take all the time in discussion, leaving no chance for the younger members to display their talents. Then again, it was argued that the younger members, with a keen appreciation of their lack of knowledge and experience, hesitate to present a paper or enter into a discussion before the older members of the Allen County Medical Society. In consequence it was thought best to organize a new society, which, while not antagonistic to the Allen County Medical Society, would be an independent organization, and open only to younger members of the medical profession.

From the constitution and by-laws we learn that "the association is to be known as the Fort Wayne Academy of Medicine, the objects being to foster, encourage, and supply more efficient means of cultivating, advancing and disseminating medical knowledge among the younger members of the medical fraternity of Fort Wayne and surrounding territory; to uphold the honor and maintain the dignity of the young profession; to excite and facilitate friendly intercourse and concert of action between them; and to promote and encourage their advancement in both literary and clinical medical science." The article upon membership says that "the active members shall be chosen by selection, with special reference to their age and experience in the medical profession, youth and inexperience in the literary medical world being the requisite qualifications. The corresponding members are to be those among the younger medical men who may not live in Fort Wayne, but desire to be affiliated with the society. The honorary members are to be those of the older medical profession, ineligible to active membership, but who have distinguished themselves in the branches of medical science, and who are in sympathy and accord with the purpose of the Academy." It is also provided that the members shall be in good standing in the medical profession, and no one under suspension from any of the National, State, District or County Medical Societies, is eligible to membership. The dues are to be \$1.00 per year, payable semi-annually in two installments of fifty cents each. Regular meetings are to be held on every other Tuesday evening, alternating with the meetings of the Allen County Medical Society. A section of the constitution provides that no action of the Academy shall be at variance or opposition to the Allen County Medical Society, and all meetings shall be arranged so that they will not con-

flict with the meetings of the Allen County Medical Society. Papers deemed suitable will be referred to the Allen County Medical Society. The code of ethics of the American Medical Association has been adopted. Each member binds himself to read at least one paper semi-annually.

We regret that it should have seemed necessary to organize another medical society in the face of the existence of the Allen County Medical Society, an organization that is a credit to the medical profession, and one that should receive the support and encouragement of every regular practitioner of medicine in the city of Fort Wayne. Some of the reasons assigned for the organization of the new society are not sound, for we do not believe that there was a crying necessity for another society where opportunity is given the younger medical men to display their talents. The program committee of the Allen County Medical Society has not only urged the younger members to present papers and reports of cases, but in some instances has even assigned papers with a view to having a suitable program for every meeting in the year, and an incentive for attendance and active work. The younger men have not only had the privilege of presenting papers and case reports, but have been warmly welcomed as contributors to the general interest of the meetings. They have without exception been treated courteously and considerately, and with a full realization that it is only by interchange of ideas that the broadest and most comprehensive education is acquired. The very fact that the papers of the younger men receive discussion at the hands of the older and more experienced physicians should be considered a compliment, and a feature worthy of encouragement. If the discussions are from men of wider experience and greater knowledge, so much the better for the reader of the paper, and so much more an incentive for active work in the preparation of creditable papers.

We regret that all this energy displayed in establishing a new medical organization could not have been turned to account in making the County Society more active, and a more important feature to the younger men. The Allen County Medical Society needs the younger men, for it is new blood which sustains and increases growth and interest. On the other hand the young men need the influence and teaching of the older and more experienced physicians whom some of the new society members seem to think can be ignored. It seems incredible that there should have been any

sentiments expressed relative to placing the new society in conflict with the older and thoroughly established Allen County Medical Society. Neither harmony nor progress would be encouraged by societies in conflict with each other. It should be remembered that our professional reputation and success as a whole is dependent upon the reciprocative help and encouragement which we give one another. The younger men cannot get along without the older men and vice versa. The Allen County Medical Society cannot prosper without the younger men, and the younger men cannot afford to do without the Allen County Medical Society. All thoughts of antagonizing the parent society should be banished. The advice of Dr. N. S. Davis, of Chicago, at the testimonial banquet on his 85th birthday, should be heeded: "If you want to promote harmony, cordiality, advancement; if you want to build up, stop pulling down. Never pull down but build up, and if your neighbor does not do what you think he ought to do, talk about his good qualities, and let his bad ones go." We are glad that sober judgment decided the question of making the new society tributary to the old, for fortunately the county society is to maintain on its membership rolls the names of nearly all those who belong to the Academy, and will be favored with the more creditable papers read at the Academy. If this results in giving the parent society an increased number of papers and increased interest, and does not in the least detract from the older society which is entitled to support, then we wish for the new society success, and THE JOURNAL-MAGAZINE stands ready to publish its transactions in full for the benefit of the members.

THE DEATHS FROM IMPURE VACCINE AND ANTI-TOXIN.

Scarcely had the excitement produced by the deaths from the administration of impure anti-toxin in St. Louis subsided when the daily press reported several deaths from tetanus at Camden, N. J., following the use of impure vaccine. As might be expected considerable opposition to the use of anti-toxin has developed in St. Louis, as a result of the fatalities reported, and the anti-vaccination cranks have scored a victory in Camden, N. J., through the refusal on the part of a large number of the inhabitants to subject themselves to vaccination in view of the development of tetanus following the use of vaccine in the cases just reported.

The fact that some carelessness upon the part of city officials

in St. Louis was responsible for the use of impure anti-toxin should not be used as an argument against the value of anti-toxin as an absolute preventive and curative agent in the treatment of diphtheria. Neither should the fact that the cases of tetanus developing in connection with vaccination at Camden, N. J., even if proven to have occurred as a result of impure vaccine or through the carelessness of the patients in exposing the vaccine wound to infection, lead to the abolishment of vaccination as a preventive of smallpox. As a matter-of-fact, the vaccine used at Camden came from a reliable manufacturing house, and was supposed to be absolutely pure. In some of the cases of tetanus the disease occurred fully two weeks after the date when tetanus should have developed had the germs been introduced with the vaccine. In all of the cases tetanus developed in persons after the removal of the vaccine scabs with opportunity for the introduction of infection. In St. Louis the deaths from anti-toxin may be directly traced to the careless manner in which the Board of Health prepared the anti-toxin. In no instance has there been a fatal result following the use of anti-toxin in St. Louis, or in other cities, when the anti-toxin bore the stamp of any one of two or three reputable manufacturing chemists, and the remedy properly administered.

In view of the fatal results already recorded we are led to remark that vaccination in all instances should be considered a surgical operation and performed under strict aseptic precautions. Following the vaccination, and until the scab has been removed without leaving an abraded surface, the site of operation should be covered for the purpose of excluding infection. In all instances the vaccine should be obtained from a reliable source, and should be of unquestioned purity. What is true of vaccine and vaccination is true of anti-toxin and its administration. If due care is observed, there will be no more such fatalities as reported from Camden, N. J., and St. Louis, Mo. The lesson, however, will serve as a warning to certain manufacturing houses who have grown careless in the preparation of vaccine and antitoxine, and to many physicians who have been equally careless in administering these established preventives.

A. E. B.

THE EVANSVILLE MEETING OF THE STATE MEDICAL SOCIETY.

The Indiana State Medical Society will hold its next annual

meeting at Evansville, on May 22 and 23, 1902. The committee of arrangements has already issued circular letters to the various county medical societies, calling attention to the fact that this is the first time in the history of the society that southern Indiana has been selected as the place of meeting. Since the adoption of migration the meetings have all been held north of a line through the central portion of the State, with the one exception of the Terre Haute meeting which is but little south of the central part of the State.

Evansville with a population of 60,000 inhabitants has always had a large and progressive medical society that for many years has been actively identified with the Indiana State Medical Society, and contributed largely to the success of the latter organization. There are, however, a large number of counties in the extreme southern section of Indiana and tributary to Evansville, that have no medical societies of any description, or, if having medical organizations are but poorly represented in the State Society. If there is any one thing which has acted as a stimulus toward the growth and increase in activity in the county societies in the northern portion of the State, it has been the interest manifested in the State Society through its meetings at Fort Wayne, South Bend, Lafayette, Anderson, and Terre Haute, brought about through the migration plan adopted five or six years ago. Not only have the county societies been benefitted through growth in membership and increase of interest, but the State Medical Society has also been a decided gainer through increase in membership and scientific interest of its members. What has been accomplished for the county societies in the northern portion of the State, and for the State Medical Society, will be accomplished for the county societies in the southern portion of the State through the Evansville meeting. The medical profession of Evansville is progressive and enterprising, and is united in an effort to give the members of the State Medical Society a meeting second to none when it convenes in the metropolis of southern Indiana, in May, 1902.

Some physicians in northern Indiana may argue that it is a long and expensive trip to Evansville, located as it is at the extreme southern border, on the Ohio river. To such we wish to say that attendance at the Evansville meeting is a duty that we owe to not only our southern friends, who are making great preparations to entertain us royally, and the State Society whose welfare we have at heart, but it is a duty which we owe ourselves as progressive

medical men, possessing a desire to sustain worthy medical organizations, increase our scientific knowledge, and stimulate a friendly and beneficial acquaintance with medical men over the State. No medical man ever lost anything by an expenditure of time and money in attending the regular meetings of his county and state medical societies. As a matter-of-fact the medical men who have the largest practices, make the most money, and are rated the highest in professional attainments are the men who are the most regular attendants at the county and state medical societies. If it were not profitable, these men certainly would not continue year after year with the same policy. We occasionally hear a physician say that he can neither afford the time nor expense to attend the State Medical Society, and it is for this reason that we mention the fact that no practitioner of medicine, no matter how busy he may be, can afford to stay away from medical societies, and particularly the State Medical Society which gives such a rich return for all that is sacrificed in attending its meetings. We already have one of the largest and most progressive state medical society in the Union, and let us see that our reputation for such a society does not diminish with the passing of time. We urge upon our readers the importance of definitely deciding to go to Evansville next May, and arranging all professional work accordingly. The committee of arrangements has secured special railroad rates, and it is more than probable that special cars will be reserved for sufficiently large parties who desire to start from any one point.

Last, but not least, the committee of arrangements desires to present a good program of suitable, practical and scientific papers, and the various county societies are urged to furnish their full quota, the papers in each instance being properly referred to the committee and the titles and synopses sent in early. A. E. B.

DEATHS FROM IMPURE ANTITOXIN.

The death of eleven children in St. Louis from lockjaw as a result of inoculation with impure diphtheria antitoxin will call public attention not only to the dangers incident to a careless administration of this drug but to the great benefit the discovery of the serum has conferred upon mankind.

In St. Louis the deaths resulted from antitoxin given out by the city health department. The distressing feature of the case is the fact that a number of the children who died from its effect or

are ill and not expected to recover were perfectly healthy when the serum was administered, it being given to them as a precautionary measure to prevent their taking diphtheria from others. They were taken with tetanus, or lockjaw, which is more fatal than diphtheria.

That the serum was infected with tetanus germs appears to have been proved beyond all reasonable doubt, the most conclusive proof being the death in convulsions of guinea pigs that were inoculated with the fluid.

These distressing results of carelessness on the part of a city health department cannot be held as shaking the overwhelming testimony of medical experience in favor of the efficacy of antitoxin. That antitoxin is a specific for diphtheria and a reliable preventive has been demonstrated in thousands of tests. Where it fails once it is efficacious in a hundred cases. Medical science, in fact, has conferred no greater boon upon the human race since the discovery of vaccination as a preventive of smallpox.

While scarcely anyone now challenges the efficacy of cowpox virus in rendering a person immune from smallpox, at the same time results of a most distressing character have been known to follow the administration of impure virus. It is the same with antitoxin. The utmost care and precaution must be used to obtain a serum that is absolutely free of all foreign germs.—*Chicago Record-Herald*.

NEWS NOTES AND COMMENTS

FINED FOR PRACTICING WITHOUT A LICENSE. A fine, amounting to \$40.50, was assessed against S. H. Earl, at Marion, for practicing medicine without license. A fine only was agreed to on the understanding that the defendant should leave the State.

PHYSICIANS' PROTECTIVE ASSOCIATION.—An association under this name has been organized at Muskegon, Mich., with the object to prevent imposition on physicians by "dead beat" patients, and to enforce the payment of bills for professional services rendered.

DR. SWARTZ IN NEW ORLEANS. In the December number of the *New Orleans Medical Journal*, we find an item to the effect that Dr. Vesta M. Swartz, of Auburn, Ind., has matriculated at the New Orleans Polyclinic for a post-graduate course in medicine.

DR. MCCOY WINS HIS SUIT AGAINST VINCENNES.—In a suit against the city of Vincennes by Dr. James N. McCoy for fees as smallpox physician during an epidemic that occurred some months ago, the jury has found for the plaintiff in the sum of \$625.00.

CHICAGO AS A MEDICAL CENTER.—Commenting upon this subject the *Clinical Review* says that in point of members in attendance at the medical schools, Chicago stands head and shoulders above any other city in the land, and in hospital advantages for study—for post-graduate work—no better facilities are to be found anywhere.

SMOKE FOR TUBERCULOSIS.—Dr. George R. Peckinpaugh, Mt. Vernon, Ind., is said to have discovered that the inhalation of smoke arising from the burning of different kinds of forest leaves destroys tubercle bacilli. Acting upon this theory the Evansville Board of Health is experimenting with this cure on the tuberculous at the County Poor House.

FOREIGN TESTIMONIALS.—The M. J. Brittenbach Co., importers of Gude's Pepto-Mangan, are at the present time sending out a neat booklet containing a large number of testimonial letters from representative medical men in foreign countries, relative to the value of Gude's Pepto-Mangan. The letters are based upon actual experience and for the most part are conservative and worthy of consideration.

THE NEGLECTED FEATURE OF WOMEN'S DISEASES. Mr. Fellows, of hypophosphite fame, is sending out a neat brochure calling attention to the frequency with which impoverished blood conditions, such as anemia, chlorosis, and other dyscrasias are met with in women's diseases. It is, of course, a natural conclusion that in the treatment of women's diseases it is advisable to prescribe some such tonics as Fellows' hypophosphites.

PHYSIOLOGICAL EXPERIMENTS WITH ANIMALS IN BALLOONS.—Some Paris physicians recently went up in balloons for the purpose of physiological observation, taking with them an assortment of dogs, rabbits, guinea pigs, and scientific instruments. Their observations on the blood appear to have been of great interest, especially on the corpuscular strength of that fluid. The red blood corpuscles are said to have shown an increase up to 10,000,000 per cubic millimeter at an altitude of 4,000 meters. The full report of the investigation is to appear later.—*Phil. Med. Jour.*

BUSINESS LEAGUE OF PHYSICIANS.—It is reported that many towns and villages throughout Colorado have Physicians' Business Leagues organized for the purpose of social and intellectual intercourse, but more particularly for the special advantage of the medical fraternity in protecting themselves against bad debtors. The members of the organizations agree to report to each other the names of all persons who are indebted for professional services beyond a certain time, and the names of all persons who for any cause refuse to pay just obligations incurred in the receiving of professional services.

PRACTICE FOR SALE.—Dr. T. E. Ringle, of Tippecanoe, Ind., the only physician in the place, offers for sale a \$2,000 practice, with \$300 worth of office furniture, instruments, medicines, and a span of good driving horses. If sold at once, Dr. Ringle will accept a cash offer of \$400, and remain for two months to introduce the new purchaser.

The town of Tippecanoe has about 300 inhabitants, and is located in a good farming community on the Nickle Plate railroad. The offer is an exceedingly attractive one and should interest anyone looking for a good location.

TETANUS IN CAMDEN. The Camden Board of Health have issued a statement relative to the tetanus cases in Camden, supposed to have been due to impure vaccine, stating that the vaccine lymph used in the process of inoculation at Camden has been examined at the Bacteriological Laboratory at Princeton, and has been found free from contamination. The inoculation of animals with the virus has not resulted in the development of tetanus, and the

president of the board concludes by saying that it is the unanimous opinion of the physicians that the vaccine was not the carrier of the tetanus germ, but that tetanus developed as a result of insufficient care of the vaccination wounds.

DR. McGOOGAN A CANDIDATE FOR CONGRESS. Dr. G. B. McGoogan, formerly a practicing physician at Arcola, has for the past four years held the position of deputy revenue collector for the Twelfth Congressional district, with an office in the Federal building at Fort Wayne. He now announces that he is a candidate for Congress on the Republican ticket in the Twelfth district, and hopes to receive the nomination at the convention. He has a large acquaintance throughout the district and feels confident that James Robinson, who was elected a year ago by a majority of but 628, can be defeated for a fourth term.

MEDICAL STUDENTS ENTERTAINED.—The Senior class at the Fort Wayne College of Medicine was recently entertained at the home of Dr. W. W. Shryock, where an opportunity was afforded for a practical study of the methods and appliances used by progressive and up-to-date dentists. Dr. Shryock was assisted in his informal talk upon dentistry by Dr. W. W. Mungen, lecturer on dental surgery at the Medical College, and Dr. Maurice Rosenthal, Prof. of Pathology at the Medical College. Refreshments were served after the lectures, and at a late hour the students returned to their homes with a feeling that the evening had been most profitably and enjoyably spent.

AN ATTRACTIVE OFFER. Every yearly subscription to Frank Leslie's Popular Monthly carries with it free the large quarter century number containing 168 pages, the Christmas number, with colored illustrations, and a beautiful art calendar for 1902. The calendar is lithographed in 12 colors and is a creation from original water color drawings, painted by a well known artist. The illustrations present some of the handsomest American actresses.

For every new subscription received by us for the Fort Wayne Medical JOURNAL-MAGAZINE we will send prepaid for one year not only the JOURNAL-MAGAZINE, but Leslie's Popular Monthly, with the beautiful art calendar and all that goes with it. Let us have your subscriptions before the January number is issued.

A NEW HOSPITAL FOR FORT WAYNE. The German Lutheran churches of Allen County are now planning to erect a hospital in the city of Fort Wayne at a cost of about \$75,000, the same to be under the exclusive control of a board appointed or elected by the members of the various Lutheran churches in the county. The proposed new hospital is to be up-to-date in every particular, and will contain all of the most modern conveniences. There is without doubt room for an institution of that character in the city, for both the Hope and St. Joseph's hospitals are nearly always crowded to their full capacity.

NO SMALLPOX IN CHICAGO.—Attention is called to the interesting fact that, while smallpox is now more or less prevalent in all sections of the country, and particularly in the large cities, Chicago is entirely free from it. No other city of the first-class in this country can make the same boast. This exceptional exemption is ascribed by the Chicago health authorities to the thoroughness with which vaccination has been performed there, no less than 950,588 persons having been examined within the past thirty months. Probably this record is something unequalled in the line of guarding against smallpox in a great city, and the benefit that is now being derived from it should be a lesson to other great centres of population. Yet 15 per cent., or over a quarter of a million, are yet unvaccinated.—*Philadelphia Medical Journal*.

DISTRIBUTION OF PHYSICIANS.—In an editorial in the *Journal of the American Medical Association*, the statement is made that the census statistics show that we must be rapidly approaching the limit of additions to the medical profession, if the individual members are to find the practice of medicine a lucrative occupation. The New England states have an average of less than 600 inhabitants to each physician. New York has 596; while Pennsylvania provides 693 people for every doctor. New Jersey with many health resorts but no medical school, and a rigorous examination board, has but one physician for every 1081 inhabitants. The profession does not fare so well in the middle western states, where in Indiana there are but 519 people to each physician, in Ohio, 529; in Michigan, 575; and in Illinois, 583. The District of Columbia has 389 inhabitants to each physician, with California next in order with 392. Colorado is third in this list with 397.

Curiously the number of dentists in the country is only one to more than 4,000 inhabitants.

CITY BOARD OF HEALTH IN TROUBLE.—Early in November City Health Commissioner MacBeth caused the arrest of Dr. C. F. Nieschang for failure to report contagious diseases under his care. The case was tried before Justice Bullerman, resulting in the acquittal of Dr. Nieschang. The court held that the evidence showed that Dr. Nieschang went to the health office for the purpose of reporting the cases and complying with the law, but as there was only a boy in charge of the office, and the boy not being competent to attend to the business of the office, the defendant could not be held responsible for failure in properly reporting the cases. Following the decision, with the acquittal of the defendant, Dr. Nieschang, in a letter published in the daily papers, announced his intention of prosecuting the City Health Commissioner for incompetency and unwarranted assumption of authority.

HOSPITAL COT AND EMERGENCY REMEDIES NECESSARY IN PUBLIC SCHOOL BUILDINGS. Elsewhere is told the story of a young woman still in her early teens, being taken ill at school, the building being one of the best and most modern of school buildings. And yet this sick pupil had to lie on the floor because no provision has been made for the temporary care of sick children. It recently happened that two teachers were taken with fainting spells in one school in one day, and the principal had no conveniences at hand for their relief. Where so many hundreds of children are congregated in one building, it would not seem improper to provide each building not only with a hospital cot but also with some simple remedies and articles for the care of slight wounds that might be caused in play. In the case which occurred yesterday the girl was required to lie prone in order to facilitate her circulation and could not be safely removed for several hours. The floor not only lacked ease for the patient, but greatly added to the difficulty of those about her in caring for her.—*Journal-Gazette*, Nov. 23.

AGAINST GARNISHEE ACTION.—Merchants and professional men who have disposed of claims against railroad men with a view to having the claims collected outside of the State of Indiana, have

incurred the displeasure of the railroad employes, and a meeting was recently held to not only protest against such practices, but to devise ways and means for fighting claims sent out of the State for collection, and to prosecute merchants who follow the practice. Committees were appointed, but upon publication of the names many men who were supposed to be in sympathy with the movement refused to serve on the committees for fear that the general public would consider that they were in sympathy with the "dead beat" tactics pursued by many railroad men who have been forced to pay their just obligations through garnishee proceedings, and who are now devising ways and means to avoid the payment of claims through such methods. It is frankly acknowledged by the majority of the railroad men that garnishee proceedings are in the main just, and particularly for the reason that in no other way can some of the "dead beat" railroad men with extravagant habits be forced to pay their honest debts.

RENEWAL SUBSCRIPTIONS.—This is a good time to renew your subscription to the JOURNAL-MAGAZINE for another year. We appreciate the good will and support of our readers and are pleased to receive substantial recognition by receipt of renewal subscriptions. We hope our December list of new and renewal subscriptions will be a large one. We acknowledge personal letters and renewal subscription to the JOURNAL-MAGAZINE during November from the following:

Drs. G. D. Brannon, Crown Point; J. J. Bowker, LaOtt; I. C. Cline, Indianapolis; W. D. Calvin, Fort Wayne; F. P. Eastman, South Bend; C. W. Goodale, Metz; S. H. Havice, Fort Wayne; F. C. Heath, Indianapolis; J. F. Hibberd, Richmond; M. T. Jay, Portland; L. Johnson, Bourbon; G. W. Kemper, Muncie; F. J. Nifer, Brimfield; Carl Schilling, Fort Wayne; C. Q. Shull, Montpelier; W. F. Shumaker, Butler; L. A. Spaulding, Bluffton; Wm. Webber, Columbia City; W. P. Whery, Fort Wayne; W. S. Williams, Kendallville; C. A. Kirkley, Toledo, O.; D. W. Finne-more, Pottsdam, N. Y.; F. G. Steuber, Lima, Ohio; G. Sheffield, Attleborough, Mass.; M. R. Weidner, Dolton, Ill; the Newberry Library, Chicago; the Surgeon General of the United States Army, Washington, D. C.; H. O. Pantzer, Indianapolis; G. A. Ross, Fort Wayne; John McCartney, Sodus, Michigan; Army and Medical Museum, Washington, D. C.; C. W. Mackey, Portland.

"DO SOMETHING FOR SOMEBODY." (With apologies to Owen Meredith.)—From a poetical but somewhat penurious patron, one of our doctors received this inquiry: ..

“Doctor, Doctor, can you tell,
What will make a sick man well?
Whiskey toddy, ham and eggs—
Will these not put him on his legs.”

In reply the Doctor wrote:

You may live without whiskey, you may live without legs;
You may live without ham, and live without eggs;
But one proposition common horse sense defends—
A man doesn't live much if he lives without friends.

So live like a gentleman, and share with your friends
All the good things of life that good fortune sends;
Your wealth and your comforts, your pleasures and pains;
Ambition's successes and each venture's gains.

Then some eye will soften and some heart grow tender
When your race is run. Someone will remember
That your soul was as warm as your own whiskey toddy—
That some of the time you did “something for somebody.”

(The above is from one of the best known surgeons of Indiana.—Editor.—*Indiana Medical Journal*.)

CITY PERSONALS. Dr. H. A. Duemling spent two weeks during November hunting in the Upper Peninsula of Michigan. He reports having killed a large number of deer, bear, moose, wolves, foxes, and numerous other wild animals. He brought nothing home but says that is due to the fact that the Michigan law does not allow anyone to take game out of the state. He says that even “kodak fiends” are prosecuted for taking pictures of wild game, and consequently his friends must take his word for reports of his success. As yet he has not reported that he had to pay any fine for shooting game out of season. Perhaps the two expensive quail obtained early in October taught him a lesson regarding the exactions of the law.

Dr. W. D. Calvin has returned from a visit to northern Wisconsin and Minnesota. Most of his time was spent in Duluth.

Dr. L. L. Culp has been made assistant professor of Pathology in the Fort Wayne College of Medicine.

Dr. Albert E. Bulson, Jr., attended the regular meeting of the Chicago Ophthalmological Society, of which he is a member, on November 12.

Dr. L. P. Drayer has resigned his position as Professor of Bacteriology in the Fort Wayne College of Medicine, giving as his reasons such a large increase in the amount of his professional work as to preclude the possibility of his giving college duties proper attention.

Dr. Chas. E. Barnett spent the last week of November hunting wild turkeys in Mississippi and other southern states.

DEATH OF DR. WERMUTH.—Dr. Adolph F. Wermuth, one of the well known and gifted young physicians of the city, died on Wednesday, November 27th, at the home of his parents, Mr. and Mrs. Chas. Wermuth. Dr. Wermuth had been in ill health for several months, but had continued his professional work up to two weeks before his death, when he had a severe hemorrhage from the lungs, followed by an acute pneumonia engrafted upon a tuberculous process. For several weeks prior to his death Dr. Wermuth had been making preparations to leave for Colorado in the hopes of regaining his health.

Dr. Wermuth was born in Germany and would have been 24 years of age on Dec. 8th. He came with his parents to America at the age of three years, and was educated at the Zion's school and the High school in this city. After his graduation from the Fort Wayne College of Medicine he served two years as house physician at St. Joseph hospital, and then went to Europe where he spent one year in study in Heidelberg and Berlin. Returning to Fort Wayne he soon acquired a lucrative practice. At the time of his death he was assistant Professor of Pathology at the Fort Wayne College of Medicine, and occupied several prominent positions of trust in some of the large German societies of the city. He was a member of the National, State and County Medical Organizations, and an officer in the newly formed Academy of Medicine of Fort Wayne. Dr. Wermuth's pleasing personality, intelligence and sterling character won for him a large circle of acquaintances and friends. He was unmarried, and leaves besides his parents, one brother and five sisters to mourn his death.

CAN'T MIX POLITICS WITH MEDICINE.—Under this heading the *New York World*, of Saturday evening, November 9th, has the following to say regarding the possible dangers following the use of diphtheria antitoxin which has been manufactured by boards of health under the control of political factions:

Dr. A. M. Phelps, of No. 62 East Thirty-fourth street, is another physician who is alarmed at the fatalities following the use of antitoxin in diphtheria cases in St. Louis. He agrees with Dr. I. N. Love, whose views were recently printed in *The Evening World*, but he is even more insistent in advocating the prevention of all meddling by municipal health boards in the manufacture of medicines.

"Apart from its personal aspects," he said to an *Evening World* reporter, "the matter is one of extreme public importance because of the harm that is likely to be done to the cause of medical progress.

"It was by similar accidents that vaccination fell into disrepute in England and that the anti-vaccinators there obtained such political power as to put an end, only temporarily it is to be hoped, to compulsory vaccination, the results of which are now being seen in the reappearance of smallpox in epidemic form.

"The question arises, What is the lesson that is taught us by the St. Louis disaster? And a very distinct answer is afforded by the letter of Dr. Love. He is evidently well acquainted with the local situation, and therefore reliance can be placed on his statements, which show the criminal folly of intrusting politicians with so responsible a duty as that of manufacturing antitoxin and vaccine virus, instead of relying on reputable pharmaceutical houses for the supply of these essentials of modern life.

"In New York City, no less than in St. Louis, have we suffered from this unwarrantable interference of 'statesmen' with matters in regard to which they are superlatively ignorant. Need anything more be said in condemnation of the system that has prevailed here within recent years than that until recently the head of the Board of Health was a layman, Col. Michael T. Murphy, and that when he was transferred to the Police Department he was succeeded by another gentleman whose fitness for the post was exemplified by the reply he is said to have given to a newspaper reporter who called to ascertain his views as to the soundness of Dr. Koch's latest opinions on the subject of tuberculosis: 'Koch—

Koch? Who is he and what has he done? I cannot say that I ever heard of him.'

"Other facts in regard to the Board of Health and its dabbling in municipal socialism for the purpose of making places for the boys and securing appropriations are well known to the members of the medical profession.

"Notable among them is the circumstance, testified to at a hearing at Albany, that sometimes vaccine and antitoxins are sold here, the only explanation forthcoming for which was that the goods referred to were old stock.

"It is but fair to state that on the staff of the Board of Health of this city there are one or two medical men of undoubted ability and standing, but they are not their own masters. If any disaster were to occur here similar to what happened in St. Louis it is more than possible that the officials in question would be made the scapegoats; but that does not alter the fact that those really responsible are men whose sole claim to the positions they hold is the "pull" they have with the powers that be, or rather the powers that were.

"The inquiry now in progress in St. Louis may or may not result in the detection of the individuals who are to be held accountable for the gross carelessness that undoubtedly was its cause. But what then? The most that can be expected is that a cry will be raised for turning certain rascals or incompetents out and filling their places with others in no way better fitted for the positions.

"Contrast with this the position of the large manufacturing houses whose reputation depends on the avoidance of the possibility of such occurrences. They cannot afford to run the risks run by politicians; for if such a catastrophe were to follow the use of any of their preparations it would mean their practical if not absolute ruin.

"Surely it is time that this dangerous practice of politicians meddling and muddling in the manufacture of powerful medicinal agents should be put a stop to. It is not called for; it is the reverse of economical; and it is bound to lead every once in a while to accidental murders of the kind just committed in St. Louis.

"It is one of the matters to which, in my opinion, the municipality of New York City and other bodies similarly placed cannot too soon turn their attention."

MEDICAL REVIEWS.

DEPARTMENT OF MEDICINE AND THERAPEUTICS.

IN CHARGE OF GEORGE W. McCASKEY, A. M., M. D.

Professor of General Medicine, Neurology, Gastro-Enterology, Pediatrics and Therapeutics
in the Fort Wayne College of Medicine, Fort Wayne, Ind.

THE USE OF ENEMA IN INSANITY.—*Modern Medicine* makes the following valuable extract from Dr. M. Craig's article in the *British Medical Journals* "The blood pressure is invariably low in acute mania, while high in melancholia. The lower pressure in mania is responsible for the restlessness which is a constant symptom in this condition. This restlessness Dr. Craig has found to be relieved by the employment of an enema of eight to ten ounces of water. The patient's condition steadily improves when the enema is retained. This is a new and very important indication for this simple hydriatic procedure. The warm or neutral bath ought to be as useful in relieving the high pressure of melancholia as is the enema in relieving the low pressure of mania. The temperature of the bath should be 94 degrees to 96 degrees, the duration from thirty to sixty minutes."—*Alienist and Neurologist*.

DEMONOLOGY OF MICROBES AND APPENDICITIS. Among the tenets of a sect of faith-curists in Oregon is the belief that microbes are imps and the appendix vermiform is the devil. The high priestess of the sect (the wife of Grant's attorney general) thus solemnly warns medical men against the removal of the devil: "Now the scientists say this portion of the body is superfluous and injurious and that it should be removed. This is a master stroke on the devil's part. Was such subtlety ever equalled? The devil says to his people: 'I, the devil, have directed the doctors how to cut the devil out of you.' My medical friends, don't you do it.

You would have nothing more to do." The faithful starve the microbes and the devil out by abstaining from all food except crackers and claret. This sect which now numbers three hundred and fifty add a new religious instance to the many of "communicated insanity" in the United States.—*Alienist and Neurologist*.

GELATINE AS A HAEMOSTATIC. The technique of the employment of gelatine for increasing the coagulability of the blood is described by Dr. J. Sailer in the *Thearapeutic Gazette* as follows: The gelatine is prepared as for ordinary media, using, however, five to eight hundredths of 1 per cent. saline solutions instead of bouillon. Since the degree of pain experienced on injection seems to be proportionate to the amount of turbidity, it is important to thoroughly clarify the solution with white of egg. Sterilization is then accomplished by heating in an ordinary steam sterilizer fifteen minutes for three successive days. In regard to the strength of the solution, there seems to be considerable divergence of opinion. Generally, however, 5 to 10 per cent. solutions are employed locally, and 1 or 2 per cent. for subcutaneous injection. About ten ounces of the 1 per cent. solution are usually required. The preferred situations for injections are between the shoulder blades under the breast, and on the outer side of the thigh. They are indicated in all hemorrhages, such as haemoptysis, haematemesis, metrorrhagia, melaena neonatorum, purpura, and the purpuric forms of the infectious diseases, and are contraindicated in only one condition, viz., acute nephritis.—*American Journal of Medical Sciences*.

THE ST. LOUIS DIPHTHERIA TETANUS CASES.—In an editorial comment on the diphtheria antitoxin tetanus in St. Louis, the *N. Y. Med. Jour.*, says: There were twenty cases of tetanus reported with ten deaths which is a suprisingly low fatality for this disease. The contaminated serum was taken from the horse "Jim," on Aug. 24th, and "Jim" showed no signs of tetanus until Oct. 1st, the day after he had again been bled the second time.

Dr. Ravold, who made the antitoxin thinks the horse may have had the tetanus bacillus slowly acting on him for some time, and did not manifest itself until its vitality was lowered by the second bleeding.

The *N. Y. Med. Jour.*, however, does not agree with this

theory, but thinks the serum would contain only the toxine, and not the organism, and would be such a small dose as to have little or no effect. In their opinion the horse "Jim" did not contaminate the serum, and that this event happened during the bottling process. They cite the same occurrence in Italy a year ago, and think that in the possibility of such contamination lies the danger of municipal manufacture of drugs. An individual manufacturer knows he cannot relax the slightest precaution, if he would keep his reputation, and commercial houses keep their animals immunized by injections of antitetanic serum, and all serum is tested by guinea pig injection before being sent out.

Since this unfortunate accident is likely to create a certain amount of prejudice in the public mind against antitoxin, it behooves the profession to strive against the growth of such opinion, since antitoxines are among the best therapeutic agents at our command, and although there is always a certain amount of risk of contamination from carelessness in handling or other causes, yet this risk is so small, compared with the positive and wide spread benefits accruing from the use of antitoxines, that it may be ignored.

DEPARTMENT OF SURGERY, GYNAECOLOGY AND OBSTETRICS.

IN CHARGE OF MILES F. PORTER, A. M., M. D.,

Professor of Surgery and Gynæcology in the Fort Wayne College of Medicine.

AN OBSTINATE SURGICAL CASE TREATED BY KOCH'S TUBERCULIN.—J. Ramsey reports the case of a man suffering from abscesses of the shoulder, swelling and pain of the knee-joint, and pain and swelling of the right side of the head. The shoulder condition was undoubtedly tuberculous, the cranial condition, and the right knee probably so. Surgical treatment did not relieve. Injections of Koch's Tuberculin (the "old form," not the more recent material) were commenced May 10, .05 m. being given daily, increased to .12 m. by June 1, and to .17 m. by June 19. Early in July the ulcer had soundly healed, and the patient was having m. ii. tuberculin injected daily. This dose was then given on alternate days for a fortnight, and on July 19 he had his last

dose. The shoulder scar was sound; there was no pain; there was no swelling on the head; the knee was quiescent, and he was wearing a plaster-splint. September 3rd he was discharged. The marked improvement dated from the time of the use of the tuberculin, and that at a bad time of the year. It was interesting to note how the reaction could only be induced by gradually increasing the dose, or by intermitting the larger doses.—*Inter-Colonial Medical Journal of Australasia. Medical Record*, Oct. 12, 1901.)

THE ADMINISTRATION OF ANESTHETICS.—In an editorial upon this subject in the *Philadelphia Medical Journal* of Nov. 30, attention is called to the lack of instruction in our medical colleges on the administration of anesthetics. It is rightly said that to appreciate the importance of successfully administering an anesthetic one has but to refer to his own first experience in the giving of an anesthetic to observe the manner in which the administration is frequently carried on, or to consider the many complications, immediate and post-operative, arising from the careless and ignorant use of anesthetics. The choosing of the proper anesthetic should also receive attention, and if a careful consideration is given to the condition of the kidneys, lungs and heart prior to operation, and the anesthetic chosen which promises the least interference with the functions of these organs, fewer cases of post-operative pneumonia, bronchitis, suppression of urine, etc., will be reported. In many of the medical centers, particularly New York, the combination of nitrous-oxide and ether is employed, and this combination of anesthetics has done much to prevent post-operative complications, and can be substituted in many if not all of the cases in which ether alone is generally used.

ROTARY LATERAL CURVATURE AND POTT'S DISEASE OF THE SPINE; DIFFERENTIAL DIAGNOSIS AND RATIONAL TREATMENT.—Dr. Daniel W. Marston concludes a paper with the above title (*Medical Mirror*) as follows:

In summing up then I may say that in rotary lateral curvature, in my opinion:

1. Mechanical support and proper gymnastic exercises are to be combined.

2. The exercises are to be taken while the patient wears the support.

3. The apparatus is removed while the patient sleeps.
4. Where the deviation is more than half the diameter of the vertebrae, an unyielding support is imperative.
5. After absorption of bone has taken place the primary curve cannot be eradicated; the "cure" lying in the establishment of compensating curves which maintain the equilibrium of the spinal column.

In tuberculosis of the spine:

1. Fixation and extension are to be employed.
2. The existence of sinuses and abscesses do not contra-indicate the immediate application of proper immobilizing apparatus.
3. Forcible correction of deformity is advised only in selected cases.
4. The success, or failure, in the treatment of these cases, is dependant largely upon
 1. The intelligence and willingness on the part of the patient.
 2. The care and help of the parents or friends.
 3. Prolonged watchfulness at regular intervals on the part of the surgeon.

TRANSPLANTATION OF THE URETER. In the *Philadelphia Medical Journal*, of Nov. 30, Dr. J. F. Baldwin, of Columbus, O., calls attention to a mistake in the publication of an item to the effect that but eleven cases of transplantation of the ureter have been reported. Dr. Baldwin asserts that he has already reported three cases, and believes that as the operation is so easy of execution there probably are many more cases that might be reported if the operators had chosen to do so.

Commenting further upon the transplantation technique, Dr. Baldwin says: "I see no reason for ligating the little remnant of ureter attached to the bladder. We would certainly anticipate no reflux of urine from that portion, while if any did occur it would readily escape through the fistula already existing into the vagina. Moreover, the chances of a ligature becoming infected at that point would be very great, and once infected it would, of course, make trouble until removed.

"Since a fistulous opening already exists between the field of operation and the vagina, it seems to me better practice to enlarge this opening sufficiently to permit a drain to be passed from the field of implantation into the vagina instead of putting the drain

through at the lower angle of the incision and thus inviting the occurrence of a weak point for a future hernia.

"I fail to see any advantage in making the implantation without opening the peritoneal cavity. The extra peritoneal operation is much more difficult, while at the same time there is necessarily left a large flap of peritoneum having a poor vascular supply and with a dead space between it and the transversalis fascia. The risk of infection in such a dead space is well understood, while the danger of sloughing of such a flap is by no means theoretical. This sloughing is alluded to, with cases, by Alban Doran in his paper on 'Cysts of the Urachus,' in volume 81, of the Medico-Chirurgical Transactions. So great is this danger that in his paper Doran states distinctly that 'the operator should never run risks through extreme anxiety to leave the peritoneal cavity unopened.'"

DEPARTMENT OF OPHTHALMOLOGY, OTOTOLOGY, LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF ALBERT E. BULSON, JR., B. S., M. D.,

Oculist and Aurist for St. Vincent's Orphan Asylum, the Allen County Orphan Asylum and the U. S. Pension Bureau for Northern Indiana and Northern Ohio,
Professor of Ophthalmology in the Fort Wayne College
of Medicine, Fort Wayne, Indiana.

PERISTENT CORNEAL FISTULA.—Dr. H. V. Wurdemann, in the November *Ophthalmic Record*, reports a case of persistent central corneal fistula in a man aged 65, which did not close under the usual treatment, but finally united following thorough curettement of the edges of the opening, and the application of a pressure bandage. The application of escharotics and galvano-cautery failed to effect a closure of the fistula.

A NEW STERILIZING SOLUTION FOR INSTRUMENTS.—Dr. W. H. Peters, in the *Ophthalmic Record*, says that if a little bi-carbonate of soda be added to a little alcohol, instruments emersed in it will not oxidize. A knife left in this solution for five days still retains its keenness of point and edge when tried on a test drum. It

is a well known fact that ordinary commercial alcohol will tarnish bright steel in 10 or 15 minutes. It is well to know that the addition of a little bi-carbonate of soda will prevent such oxidization.

INTUBATION OF AN INFANT SEVEN DAYS OLD.—Dr. Geo. M. Bailey, in *American Medicine*, of Nov. 2, reports that he successfully performed intubation of a seven-day-old infant suffering from difficult respiration, due to an inflammation of the larynx accompanying German measles. On the third day after the intubation the tube was taken out, cleansed and reinserted. By the seventh day the inflammation had subsided sufficiently so that the tube could be removed permanently. For six weeks following the intubation the infant's cry could not be heard, but gradually improvement took place, and in the end perfect recovery.

OPERATIVE TREATMENT OF STRABISMUS.—In an article upon this subject, by Dr. A. E. Davis, presented at the St. Paul meeting of the American Medical Association, the various forms of operative treatment advocated up to the present time, are considered. He, however, gives special preference to the method of Panas, which consists in stretching the strong muscles in each eye (internal recti in convergent squint, and the external recti in divergent squint) and then tenotomy, after Panas' method. Both eyes are operated on in every instance. In convergent squint on the internal recti, in divergent squint on the external recti. The tenotomy is performed in the usual way, with this important variation, that the muscle to be operated upon is stretched before cutting. For example, in convergent squint the hook is placed under the tendon of first one internal rectus and then the other, and the eye turned forcibly outward until the cornea is entirely hidden under the external canthus, then the tendon is separated as in ordinary tenotomy. In divergent squint each external rectus is stretched by turning the eye forcibly inward until the cornea is hidden under the internal canthus, then simple tenotomy is performed. Both eyes are bandaged for twelve to fifteen hours, when the bandage is removed and iced cloths applied. In convergent squint, if the effect is insufficient, atropin is instilled and glasses then worn; if over-effect, glasses are left off and no atropin used.

In divergent squint, if under effect, glasses are put on; if over-effect, glasses are left off and atropin instilled.

The immediate result, as a rule, after a Panas operation is an over-effect, varying from five to twenty-five or thirty degrees. This rapidly disappears, however, till within a few days to a few weeks, in exceptional cases months, the eyes become parallel, and in the great majority of cases remain so, many of the cases securing single binocular vision by one operation. To anyone performing Panas' operation for the first time, the immediate result is somewhat alarming. Dr. Davis says: "I must confess I was reluctant to undertake the operation until I saw the good results obtained by Dr. Roosa in eyes operated upon by this method. Especially was I fearful of over-effect in small degrees of squint. My experience with the operation, however, has taught me, contradictory as it may seem, that in low degrees of squint we are not so apt to get over-effect as in the higher degrees."

THE NON-OPERATIVE TREATMENT OF STRABISMUS. In a paper upon this subject by Dr. Edward Jackson, presented at the St. Paul meeting of the American Medical Association, the assertion is made that a large proportion of cases of squint may be cured without operation, and that the number so cured will increase as it becomes customary to resort to the adoption of proper measures as soon as the deviation is noticed. In all cases some non-operative treatment is essential to effect a perfect cure, and it includes the entire treatment for many cases, and the earliest treatment for all. For the majority of cases the time for this treatment begins as soon as the squint is first noticed, and in practical importance correcting lenses far out-weigh all other measures for the non-operative treatment of squint. Lenses remove the most common and serious obstacles to binocular vision that are removable, but in every case the lenses should *accurately correct* all of the ametropia. Such lenses should be worn until the complete cure of the squint or complete failure to benefit shows them to be no longer necessary.

Failure to rightly employ lenses is the most common cause of failure to cure strabismus. A very large proportion of the failures of glasses to cure strabismus in the early years of life must be ascribed to the fact that glasses do not correct the ametropia. In many of these cases the glasses have been fitted by opticians and

jewelers, but even when prescribed by ophthalmologists of reputation and experience one cannot be sure that they are in all instances "correcting" lenses. No one who cannot measure refraction objectively, which in effect means that no one who cannot apply skiascopy with sufficient accuracy to obtain by it the data for prescribing lenses, is competent to treat strabismus.

A PASTE THAT WILL ADHERE TO ANYTHING.—Prof. Alex. Winchell is credited with the invention of a cement that will stick to anything. Take two ounces of clear gum arabic, one and one-half ounces of fine starch, and one-half ounce of white sugar. Pulverize the gum arabic, dissolve it in as much water as the laundress would use for the quantity of starch indicated. Dissolve the starch and sugar in the gum solution. Then cook the mixture in a vessel suspended in boiling water until the starch becomes clear. The cement should be as thick as tar, and kept so. It can be kept from spoiling by dropping in a lump of gum camphor, or a little oil of cloves or sassafras. This cement is very strong indeed, and will stick perfectly to glazed surfaces, and is good to repair broken rocks, minerals, or fossils. The addition of a small amount of sulphate of aluminum will increase the effectiveness of the paste, besides helping to prevent decomposition.—*Am. Jour. Surg. and Gynecol.*

BOOK REVIEWS.

HEMMETER. DISEASES OF THE INTESTINES.—Their Special Pathology, Diagnosis and Treatment. With Sections on Anatomy and Physiology, Microscopic and Chemico Examination of the Intestinal Contents, Secretions, Feces and Urine. Intestinal Bacteria and Parasites; Surgery of the Intestines; Dietetics; Diseases of the Rectum, etc. By John C. Hemmeter, M. D., Philos. D., Professor in the Medical Dept. of the University of Maryland; Consultant to the University and Director of the Clinical Laboratory, etc. In two volumes. Volume I—Anatomy, Physiology, Intestinal Bacteria, Methods of Diagnosis, Therapy and Materia Medica of Intestinal Diseases. Diarrhea, Constipation, Enteralgia and Enterodynia, Meteorism, Dyspepsia, etc. With many original illustrations, some

of which are in colors. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. 1901. Large octavo, 740 pages. Price, \$5.00 per volume.

The first volume of this work, which has been announced for some time, has at last put in an appearance. It is not too much to say that it fully sustains the reputation which the author's cognate work upon the stomach has acquired both in this country and abroad.

This volume treats of the anatomy and physiology of the intestines, intestinal bacteria, methods of diagnosis, and the general principles of treatment, with special chapters on enteritis, ulcers, neoplasms, etc.

The chapter on intestinal bacteria is written by Dr. Wm. Stokes, and is an elaborate article covering seventy pages of the volume. It also includes more than the title indicates by consideration of protozoa which undoubtedly occupies a prominent, but as yet imperfectly understood, part in the pathology of intestinal diseases.

The author lays great stress upon the necessity of bringing to bear upon all cases every available means of diagnosis, and further justly remarks that: "Our only hope for advance in diagnosis lies in such methods as gastroscopy, duodenal intubation, and sigmoidoscopy, which bring the interior of the stomach and intestines closer to our methods of investigation.

Another chapter to which I desire to call special attention is that dealing with foods. There is no subject, perhaps, connected with practical medicine so apparently commanding a place as the food we eat that is yet so really abstruse and elusive when we come to make a special and rational application of existing knowledge in the treatment of individual cases. It is, perhaps, not saying too much to assert that the man who has complete mastery of existing knowledge of dietetics, even though this is necessarily defective, has added one of the strongest therapeutic levers to his machinery for the benefit of those who are prostrated by disease. A thorough study of this chapter will go a long way towards supplying a pressing need for practical knowledge in this line, but it should be supplemented by thorough study of some of the volumes dealing exclusively with this subject.

I wish to express my hearty approval of the statement made

by the author that the "so-called chemical antiseptics have a very limited range of utility." They should not be entirely discarded but on the other hand it is folly to place a very large reliance upon them as the principle method of attack in the case of severe intestinal toxæmia.

The volume closes with a chapter on intestinal neoplasms which is illustrated by some excellent full page reproductions.

We will await the appearance of the second volume with deep interest, and predict that upon its completion American Medicine will have produced the most comprehensive and exhaustive treatise upon the subject extant in the English language, if not in any language.

G. W. M.

AN INTERNATIONAL SYSTEM of Electro-Therapeutics for Students, General Practitioners, and Specialists by Numerous Associated Authors. Edited by Horatio R. Bigelow, M. D., Permanent Member of the American Medical Association, Fellow of the British Gynaecological Society, etc., etc. Second Edition, Thoroughly Revised and Brought up to the Present Date, with several entirely new departments embodying the most recent developments of the science. Edited by G. Betton Massey, M. D., Ex-President and Fellow of the American Electro-Therapeutic Association; Member of the American Medical Association, etc. Thoroughly illustrated. Philadelphia. F. A. Davis Company, Publishers. 1901.

This work, the second edition of which has just appeared under the able editorial supervision of Dr. J. Betton Massey, is written by about thirty physicians, mostly American, each one of which is well known in the field which his contribution covers. The book lacks, of course, the unity and comprehensive view of a symmetrical whole which we would expect to find in a volume emanating from a single writer. On the other hand it has the advantage of revealing to a fuller extent than single writer could realize the latest discoveries, and the fullest technical details in a special and therefore narrower fields which each man has cultivated in a manner which would be impossible if his work covered the entire range of electro-therapeutics.

The volume is divided into seven sections each one of which is lettered and paged separately. It would be impossible to take

up each one of the many chapters which make up the volume, and give it a special analysis. In the first section a special attention is directed to the chapter by Dr. Herrman which points out the necessity for special education in electro-therapeutics. No one who has given the subject any attention, or has had occasion to observe the extremely limited acquaintance which many practitioners have with electro-therapeutics will doubt the importance of such a chapter.

The second section of the book goes a long way towards supplying facilities for realizing the indications pointed out in the above named chapter. It deals with electro-physics and electro-physiology, and contains about 350 pages in which are treated very satisfactorily the subjects of electro-physics, animal electricity, electro-physiology, and the galvanic current.

Following this section comes the several sections dealing with the special application of electricity in gynaecology and obstetrics, diseases of the nervous system, disorders of the abdominal and thoracic viscera, diseases of childhood, and electro-surgery. A special attention is called to an excellent chapter by Dr. Peterson on cataphoresis—a department of electro-therapeutics which has been grossly neglected by the majority of practitioners. The most surprising results can sometimes be obtained by the use of this method in the relief of intractable pain which would otherwise require the use of dangerous narcotics. The fact that anodynes and other remedies can with absolute certainty be carried into the deeper tissues is a fact which should be much more widely appreciated than it is, and receive a much wider application.

Altogether the volume cannot be too highly commended, and deserves a conspicuous place in the working library of every practical physician.

G. W. M.

A N I N D E X

TO

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